INSTRUCTIONS

JVC

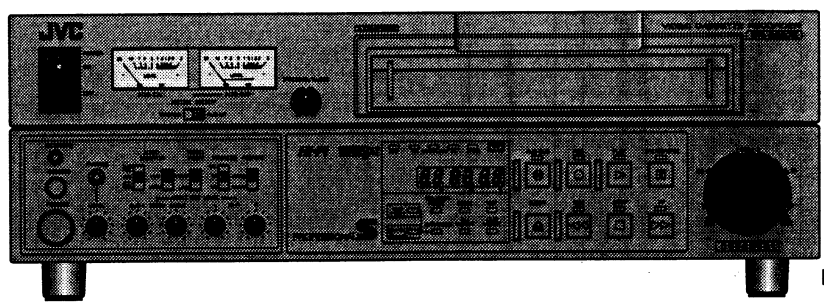
BR-S800E

VIDEO CASSETTE RECORDER

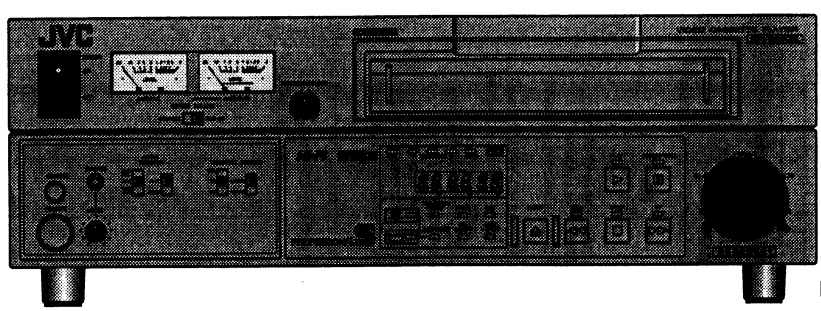
BR-S500E

VIDEO CASSETTE PLAYER

S-VHS 625 VHS PAL Hi-Fi



BR-S800E



BR-S500E

SAFETY PRECAUTIONS

Warning Notice
FOR YOUR SAFETY (Australia)

1. Insert this plug only into effectively earthed three-pin power outlet.
2. If any doubt exists regarding the earthing, consult a qualified electrician.
3. Extension cord, if used, must be three-core correctly wired.

IMPORTANT (In the United Kingdom)
Mains Supply (AC 240 V ~)
WARNING – THIS APPARATUS MUST BE EARTHED

The wires in this mains lead are coloured in accordance with the following code;

GREEN-and-YELLOW:	EARTH
BLUE:	NEUTRAL
BROWN:	LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows.
The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured GREEN or GREEN-AND-YELLOW. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or which is coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

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POWER SYSTEM
Connection to the mains supply
This unit operates on voltage of 220 to 240 V AC, 50/60 Hz.

This unit is produced to comply with Directives 76/889/EEC, 82/499/EEC, 87/308/EEC, and IEC Publ.65.

WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
To prevent electric shock, do not open the cabinet. No user serviceable parts inside. Refer servicing to qualified service personnel.

Note:
The rating plate and the safety caution are on the rear of the unit.

S-VHS 625

■ Cassettes marked "S-VHS" and "VHS" can be used with this video cassette recorder. However, S-VHS recordings are *possible only with cassettes marked "S-VHS".*

WARNING
It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast, or cable programme and in any literary, dramatic, musical or artistic work embodied therein.

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1 INTRODUCTION

1-1 ABOUT THIS MANUAL

This manual introduces you to the BR-S800E S-VHS Recorder and the BR-S500E S-VHS Player. The BR-S500E is a playback-only VCR. It does not have the recording capability of the BR-S800E. Read this manual carefully before setting up and operating the BR-S800E/BR-S500E. This manual consists of the following sections.

Section 1 INTRODUCTION
This section describes the organisation of this manual and explains the main features and the precautions you should take when operating the BR-S800E/BR-S500E.

Section 2 CONTROLS, CONNECTORS, AND DISPLAYS
A basic description of all controls, connectors, and displays. If you are already familiar with professional editing techniques and know how to use a professional VCR, you will probably be able to start operating your VCR after you read this section.

Section 3 CONNECTIONS
This section describes how to connect the BR-S800E/BR-S500E to other units.

Section 4 MENU SWITCH SETTING
The BR-S800E/BR-S500E incorporate a "Menu Switch" function which lets you customise the VCR according to your requirements with a variety of settings on screen. Setting procedures and setting items are described in this section.

Section 5 LOADING/UNLOADING
This section describes how to load or unload video cassettes.

Section 6 PLAYBACK
This section describes preparations and settings for playback.

Section 7 RECORDING
This section describes preparations and settings for recording. This section can be omitted by BR-S500E users.

Section 8 EDITING WITH RM-G800U (option)
This section outlines editing procedures when using the BR-S800E/BR-S500E in combination with the optional editing controller RM-G800U. Refer to the RM-G800U's manual for details.

Section 9 CTL TIME CODE
This section discusses the principles of the CTL time code system and explains how to use it.

Section 10 IN CASE OF DIFFICULTY
This section suggests ways to respond to potential difficulties or malfunctions of your VCR.

Section 11 OPTIONAL ACCESSORIES
Optional boards and accessories are shown in this section.

Section 12 APPENDIX
This sections explains the terms which are used in this manual.

Section 13 SPECIFICATIONS
Specifications of the BR-S800E and BR-S500E are shown in this section.

Any description in this manual indicated as "BR-S800E only" refers to instructions applicable only to the BR-S800E. All VCR illustrations used in this manual are of the BR-S800E.

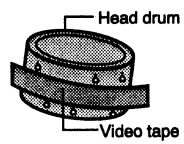
1-2 MAIN FEATURES

- The BR-S800E/BR-S500E offer the performance and functions required of professional VCRs.
- Rugged construction with DD (Direct Drive) motor and aluminum diecast chassis for professional use.
- A simple, low-cost editing system can be configured by combining the BR-S800E and BR-S500E with the optional RM-G800U editing controller.
- A built-in CTL time code generator/reader permits accurate editing is possible in combination with the RM-G800U. (CTL time code setting is only possible with the RM-G800U.)
- 4-Field sequence colour frame servo.
- Easy system upgradeability with a variety of optional boards.

1-3 PRECAUTIONS

VCR

- DO NOT use the recorder in places subject to the following conditions:
  – extreme heat, cold, or humidity,
  – dust,
  – near appliances generating strong magnetic fields,
  – vibrations, or
  – poor ventilation.
- Be careful of moisture condensation.
  DO NOT use the recorder immediately after moving it from a cold place to a warm place. This will cause water vapor to condense on the still-cold video head drum and tape guides and may damage the tape and the recorder.
  If condensation occurs, the warning code "021" appears on the counter and the cassette is ejected. (☞p.51) The drum will start rotating to dry the head drums. Keep the VCR power on until the warning code turns off.



- Handle the recorder carefully.
  • DO NOT block the ventilation openings.
  • DO NOT place anything heavy on the recorder.
  • DO NOT place liquids on the top of the recorder.
  • DO NOT place a monitor, etc. on the recorder.
  • Use in horizontal (flat) position only.
- During transportation,
  • Avoid excessive shocks to the recorder during packing and transportation.
  • Before packing, be sure to remove the cassette from the recorder.
- Proper maintenance such as cleaning dust, adding oil, or replacing parts are necessary to obtain optimum performance and a longer service life. We recommend you do maintenance on a regular basis (once every 500 hours). Total drum rotation hours can be checked via on-screen display. (☞p.17)

VIDEO CASSETTES

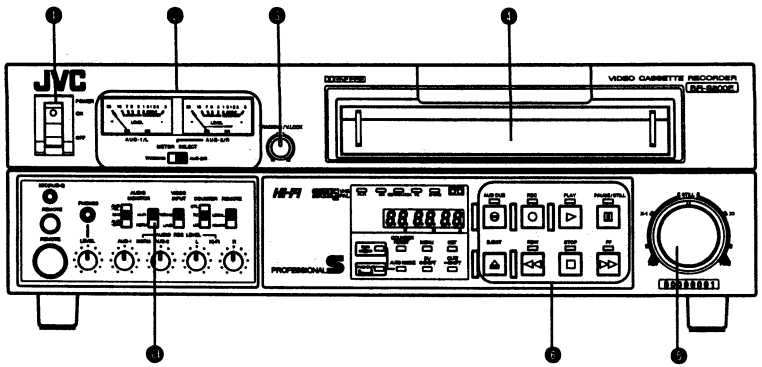
- This recorder uses S-VHS and VHS cassettes.
  S-VHS: SE-180 for 180 minutes SE-120 for 120 minutes, SE-90 for 90 minutes, SE-60 for 60 minutes, and SE-30 for 30 minutes.
  VHS: E-180 for 180 minutes, E-120 for 120 minutes, E-90 for 90 minutes, E-60 for 60 minutes, and E-30 for 30 minutes.
  An optional cassette adapter (SA-CP11U) is required when using C-size cassettes. Use SE-C30/C20 or E-C30/20 cassettes.
  Do not use tapes that are longer than the SE-260/E-260.
- DO NOT expose the cassettes to direct sunlight. Keep them away from heaters.
- DO NOT expose the cassettes to extreme humidity, violent vibrations or shocks, strong magnetic fields (near a motor, transformer or magnet), or excessive dust.
- Place the cassettes in cassette cases and position vertically.
- To prevent accidental erasure, remove the cassette's safety tab. To record on a cassette whose safety tab has been removed, cover the hole with adhesive tape.

WARNING:
It should be noted that it may be unlawful to re-record pre-recorded tapes, records, or discs without the consent of the owner of copyright in the sound or video recording, broadcast, or cable program and in any literary, dramatic, musical, or artistic work embodied therein.

2 CONTROLS, CONNECTORS AND DISPLAYS

2-1 FRONT PANEL

Illustration shows BR-S800E



❶ POWER switch

POWER ON OFF Turns the power ON or OFF. When power is ON, the time counter and level meters will be illuminated.

❷ Level meter section

[AUD-1/L] Audio-1/L-ch level meter

AUD-1/L Indicates the audio level of the normal audio-1 or Hi-Fi left-channel signal during recording and playback. Hi-Fi/Normal is selectable with the AUDIO MONITOR Hi-Fi/NORMAL switch ❽.

[AUD-2/R] Audio-2/R-ch level meter/tracking meter

AUD-2/R Depending on the setting of the METER SELECT switch, this indication changes as shown below.

METER SELECT TRACKING AUD-2/R

AUD-2/R: Indicates the audio level of the normal audio-2 or Hi-Fi right-channel signal during recording and playback.

TRACKING: Indicates video FM level as a tracking meter during playback.

❸ TRACKING control

TRACKING / V.LOCK Adjusts tracking. Turn in either direction during playback until the tracking meter deflects all the way to right. Functions as a V.Lock adjustment control in the Still mode and as a tracking adjustment control in slow-motion playback. (☞p.36)

❹ Cassette loading slot

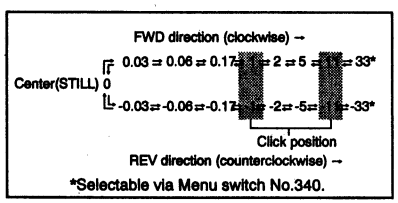
For insertion and removal of the video cassettes.

❺ Search dial

Used for search while in the Play or Still mode. The dial stays in the last set position even if the mode is changed during search.

Tape speed varies as shown below depending on the position the dial is turned to. (*Step slow mode)

*Slow mode is selectable via Menu switch No. 337.



*Selectable via Menu switch No.340.

2-1 FRONT PANEL

❻ Operation buttons

[AUD DUB] button (BR-S800E only)

Used for audio dubbing on the normal audio-2 track*.

To start audio dubbing: Press PLAY while pressing this button in the Play or Still mode. Audio dubbing will start and the AUD DUB indicator will light.

To temporarily stop audio dubbing: Press PAUSE/STILL.

To re-start audio dubbing: Press PLAY.

*Selectable via Menu switch No.208.

[REC] button (BR-S800E only)

To start recording: Press PLAY while pressing this button in the Stop mode. Recording will start and the REC and PLAY indicators will light.

To temporarily stop recording: Press PAUSE/STILL. The PAUSE/STILL indicator will light and recording will be paused.

To re-start recording: Press PLAY.

E-E function: When this button is pressed during playback, the monitor screen switches from the playback picture to the E-E picture so that the input signal can be monitored.

[PLAY] button

To start playback: Press in the Stop mode. Playback will start and the PLAY indicator will light.

To pause playback: Press PAUSE/STILL. The PAUSE/STILL indicator will light and a still picture will be produced.

To re-start playback: Press this button.

Reference pages
Audio dubbing p.41
Recording p.38
Playback p.34

MENU SWITCHES

In addition to switches on the front panel, the BR-S800E/BR-S500E incorporate a comprehensive set of Menu switches for more flexible VCR setup.

For setting items related to the functions described on this page, the following Menu switches are available.

Page reference

●Search
- No.204 Hi-Fi OUT AT SEARCH 30
- No.301 DIRECT SEARCH 31
- No.337 SLOW MODE 32
- No.340 SEARCH SPEED 32

●Audio dubbing
- No.208 AUDIO DUB SELECT 29
- No.339 A.DUB ENABLE AT LTC 32

●Recording

Servo
- No.000 FRAME SERVO 28
- No.003 SYNC SELECT 28
- No.004 AUTO H. PHASE 30

Video
- No.100 S-VHS SELECT 28
- No.101 EDIT SELECT 28

Audio
- No.200 Hi-Fi AUDIO REC 29
- No.201 NORM. AUDIO DOLBY NR 29
- No.202 AUDIO LIMITER 29
- No.205 AUDIO-1 REC 29
- No.206 AUD-2/LTC 30
- No.207 AUDIO INPUT SELECT 30
- No.339 A.DUB ENABLE AT LTC 32

System
- No.302 AUTO REC. PREROLL 31
- No.304 RECORDING INHIBIT 31
- No.305 REPEAT REC. 31

●Playback

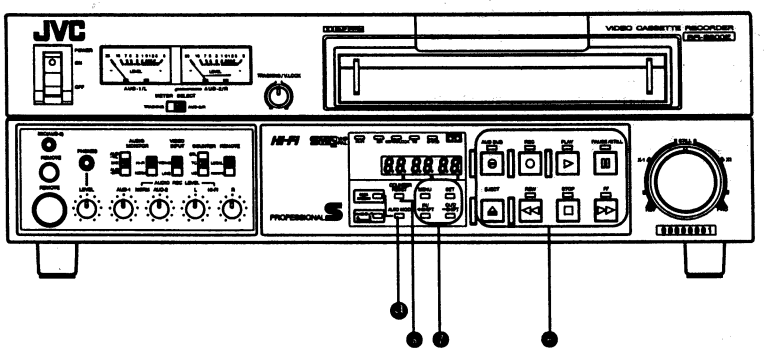
Servo
- No.000 FRAME SERVO 28
- No.001 TBC CONNECT 30
- No.003 SYNC SELECT 28
- No.004 AUTO H. PHASE 30

Video
- No.101 EDIT SELECT 28

Audio
- No.201 NORM. AUDIO DOLBY NR 29
- No.203 AUDIO OUT SELECT 30
- No.206 AUD-2/LTC 30

2-1 FRONT PANEL

Illustration shows BR-S800E



❶ Operation buttons

[PAUSE/STILL] button

During recording: Press to temporarily stop recording. The PAUSE/STILL indicator will light.

During playback: Press to produce a still picture. The PAUSE/STILL indicator will light.

During Still: Press to advance the frame.

[EJECT] button

To eject a cassette: Press this button. The modes in which the cassette can be ejected are slectable via the Menu switch.

[REW] button

To rewind: Press this button. The REW indicator will light and the tape is rewound at 140X normal speed. Monitor screen switches to E-E picture during rewind. REW speed is selectable via the Menu switch.

[STOP] button

To stop the tape: Press this button. Tape stops and the STOP indicator lights. Monitor screen switches to E-E picture.

[FF] button

To fast forward: Press this button. The FF indicator will light and the tape is fast-forwarded at about 140X normal speed. Monitor screen switches to E-E picture during fast-forward. FF speed is selectable via the Menu switch.

MENU SWITCHES

In addition to switches on the front panel, the BR-S800E/BR-S500E incorporate a comprehensive set of Menu switches for more flexible VCR setup.
For setting items related to the functions described on this page, the following Menu switches are available.

Page reference

●Eject
No.300 DIRECT EJECT 31

●REW/FF
No.312 MODE AT TAPE END 31
No.319 TAPE MAX SPEED 31

2-1 FRONT PANEL

❼ Menu switch/Repeat play setting buttons

[MENU] button

To switch to Menu switch setting mode: Press this button.

To return to time counter: Press again.

To switch to Menu switch-2 setting mode: Press after setting Menu switch No.338 "MEMORY SW-2" to "OPEN".

To switch to hour meter display: Set Menu switch No.909. (☞p.17)

[SET] button

Sets data in Menu switch setting. Also used to set the repeat playback start or end point when pressed together with the IN/+SHIFT or OUT/–SHIFT button.

[IN/+SHIFT] button

During Menu switch setting: Press to advance Menu number.

In Repeat Playback mode: After Repeat Playback mode is engaged with the AUTO MODE button ⓭, press SET together with this button to set the repeat playback start point.

[OUT/–SHIFT] button

During Menu switch setting: Press to reverse Menu number.

In Repeat Playback mode: After Repeat Playback mode is engaged with the AUTO MODE button ⓭, press SET together with this button to set the repeat playback end point.

❽ COUNTER RESET button

To reset CTL time counter to "0:00:00": Press this button.

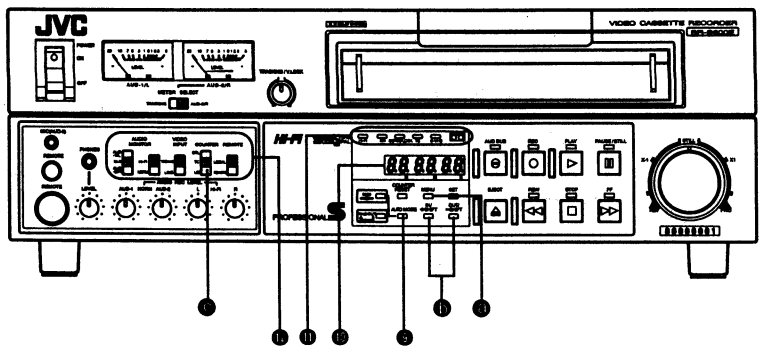
In Repeat Playback mode: Press this button to simultaneously reset playback start/end point. To reset the start point only, press this button while pressing IN/+SHIFT. To reset the out point only, press this button while pressing OUT/–SHIFT.

With timecode/user bit display: No effect.

Reference pages
Repeat playback p.37
Menu switch setting p.24
Hour meter display p.17

2-1 FRONT PANEL

Illustration shows BR-S800E



❾ AUTO MODE button with indicators
[AUTO MODE] button

Each time this button is pressed, the auto operation mode changes as follows:

Counter search: Tape will automatically stop at counter "0:00:00" position during rewind or fast-forward.

Repeat playback: Engages repeat playback operation after start/end points have been entered.

No indicator light: No auto operation is engaged.

Counter search indicator

Lights when Counter Search mode is activated with AUTO MODE.

Repeat indicator

Lights when Repeat Playback is activated with AUTO MODE.

⓬ Counter display

Usually displays tape time, time code, and user bits. When the MENU button ⓫ is pressed, display changes to Menu switch setting. Also displays the preset repeat playback start or end point when the IN/+SHIFT or OUT/–SHIFT button ⓭ is pressed.

Counter mode: With the COUNTER switch ⓒ, the counter display changes as follows:
- CTL time counter
- CTL time code data
- CTL time code user bit data

When LTC/VITC board SA-R50E (optional) is installed: With the COUNTER switch ⓒ, the counter display changes as follows:
- CTL time counter
- LTC/VITC time code data
- LTC/VITC time code user bit data

Available display of each counter mode:

CTL time counter	-9:59:59 — 9:59:59 (hours, minutes, seconds)
CTL/LTC/VITC time code	00:00:00 — 23:59:59 (hours, minutes, seconds)
LTC/VITC user bit	00 00 00 — FF FF FF (First 6 digits can be displayed)
CTL user bit	00 00 — FF FF (All 4 digits can be displayed.)

Reference pages
Counter search p.37
Repeat playback p.37
Displays p.16

☞ p.56 GLOSSARY: CTL, Time code, User bits

2 CONTROLS, CONNECTORS AND DISPLAYS

2-1 FRONT PANEL

⓫ LED indicators
[HI-FI] indicator

Lights when recording Hi-Fi audio or when playing back a Hi-Fi-recorded tape. Also lights in the E-E mode when the Menu switch No.200 "Hi-Fi AUDIO REC." is set to "ON".

[NR] indicator

Lights when Dolby* NR is ON (via Menu switch No.201).

[SERVO LOCK] indicator

Lights when the capstan and drum servos are locked to the reference sync signal during playback and recording.

[TC] indicator

Lights when the Menu switch No.206 "LTC SELECT" is set to "LTC".

[S-VHS] indicator

Lights when an S-VHS tape is inserted. Also lights when recording in the S-VHS mode or when playing back an S-VHS-recorded tape.

Turns off when recording in the VHS mode or when playing back a VHS-recorded tape.

"Cassette loaded" indicator

Lights when a cassette is loaded.

MENU SWITCHES

In addition to switches on the front panel, the BR-S800E/BR-S500E incorporate a comprehensive set of Menu switches for more flexible VCR setup.
For setting items related to the functions described on this page, the following Menu switches are available.

Page reference

●Hi-Fi audio recording
No.200 Hi-Fi AUDIO REC. 29

●Dolby NR setting
No.201 NORM. AUDIO DOLBY NR ... 29

●LTC
No.206 AUD-2/LTC 30

●VHS recording with S-VHS tape
No.100 S-VHS SELECT 28

⓭ Setting switches
[AUDIO MONITOR] select switches

Selects audio output for the PHONES jack and the AUDIO MONITOR OUT connector. Audio level meters will switch corresponding to the setting of the Hi-Fi/NORM switch.

Hi-Fi:	To monitor the Hi-Fi audio signals. Audio level meters switch to Hi-Fi audio level meters.
NORM:	To monitor the normal audio signals. Audio level meters switch to normal audio level meters
AUD-1/L:	To monitor the normal audio-1 or Hi-Fi left-channel signal.
MIX:	To monitor the AUD-1/L and AUD-2/R signals together. The stereo signal is output from the PHONES jack. Output of mixed normal audio and Hi-Fi audio signals is not possible.
AUD-2/R:	To monitor the normal audio-2 or Hi-Fi right-channel signal.

[VIDEO INPUT] select switch (BR-S800E only)

Selects an input video signal.

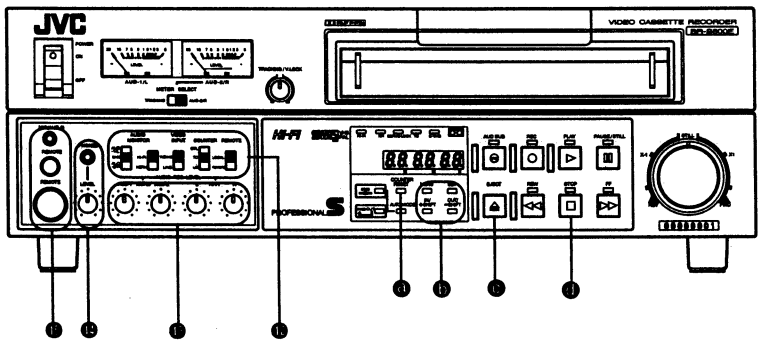
LINE:	To select the composite video signal input to the VIDEO IN LINE connector.
Y/C443:	To select the separate Y/C signal input to the VIDEO IN Y/C443 connector.

*Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

☞ p.56 GLOSSARY: Dolby NR, LTC

2-1 FRONT PANEL

Illustration shows BR-S800E



⓮ Setting switches

[COUNTER] select switch

COUNTER / CTL / TC / UB — Selects counter display mode.

CTL:	Tape time based on CTL signals is displayed in hours, minutes, and seconds. (–9:59:59 — 9:59:59)
TC:	When LTC/VITC board SA-R50E (optional) is not installed: CTL time code is displayed in hours, minutes, and seconds.
	When LTC/VITC board SA-R50E (optional) is installed: LTC or VITC time code is displayed in hours, minutes, and seconds.
UB:	When LTC/VITC board SA-R50E (optional) is not installed: CTL time code user bits (4-digit) are displayed.
	When LTC/VITC board SA-R50E (optional) is installed: LTC or VITC time code user bits (first 6 digits) are displayed.

[REMOTE] select switch

REMOTE / LOCAL / REMOTE — Selects between remote and local control of the VCR.

LOCAL:	For direct control with the VCR's function buttons. Remote control (optional) is not operative.
REMOTE:	For remote control via the optional remote control connected to the REMOTE connector.

When REMOTE is selected:
The COUNTER RESET button ⓫, menu switch setting buttons ⓬, the EJECT button ⓭, and the STOP button ⓮ are still operative. All other switches and controls (except the COUNTER select switch and the search dial) become inoperative.

☞ p.56 GLOSSARY: CTL

2 CONTROLS, CONNECTORS AND DISPLAYS

2-1 FRONT PANEL

⓯ Audio recording level controls (BR-S800E only)
Adjusts recording levels separately for the Hi-Fi left/right-channel signals and the normal audio-1/2 signals.

⓰ Headphone jack with level control

[PHONES] jack
For headphone connection (M 3.5, stereo). The audio signal selected with AUDIO MONITOR can be monitored.

[LEVEL] control
Adjusts signal level output from the PHONES jack.

⓱ Microphone/Remote connectors

[MIC] jack (BR-S800E only)
For microphone connection (M 3.5, mono). Normal audio-2 signal switches from line to microphone.

[REMOTE] connector (RCA)
For serial remote connection. Connect a remote control RM-G30U (optional). Set the REMOTE switch to "REMOTE".

[REMOTE] connector (12-pin)
For editing control. Connect an editing controller RM-G800U (optional). Set the REMOTE switch to "REMOTE".

When both REMOTE connectors are connected to remote controls:
VCR can be controlled by either remote control (if the REMOTE switch is set to "REMOTE").

MENU SWITCHES

In addition to switches on the front panel, the BR-S800E/BR-S500E incorporate a comprehensive set of Menu switches for more flexible VCR setup.
For setting items related to the functions described on this page, the following Menu switches are available.

Page reference

●Audio recording

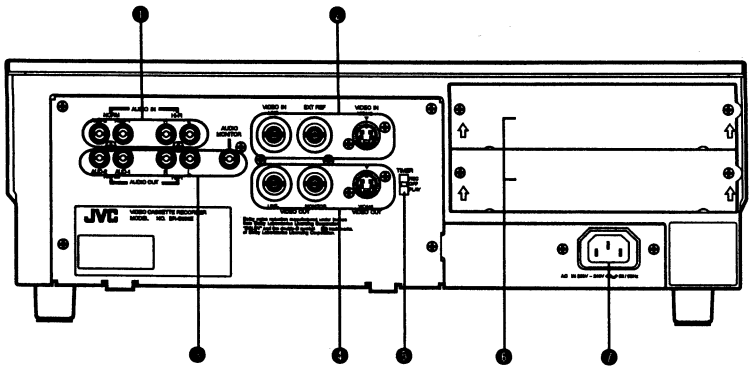
No.200 Hi-Fi AUDIO REC 29
No.201 NORM. AUDIO DOLBY NR ... 29
No.202 AUDIO LIMITER 29
No.205 AUD-1 REC 29
No.206 AUD-2/LTC 30
No.207 AUDIO INPUT SELECT 30
No.208 AUD DUB SELECT 29

●Audio playback

No.203 AUDIO OUTPUT SELECT 30
No.204 Hi-Fi OUT AT SEARCH 30

2-2 REAR PANEL

Illustration shows BR-S800E



❶ Audio input connectors

[AUDIO IN NORMAL] connectors (RCA) (BR-S800E only)
Accepts audio signals for recording on the normal audio track.

[AUDIO IN HI-FI] connectors (RCA) (BR-S800E only)
Accepts audio signals for recording on the Hi-Fi audio track*.
(*Selectable via Menu switch.)

❷ Video input connectors

[VIDEO IN LINE] connector (BR-S800E only)
Accepts composite video signals.

[EXT REF] connector (BNC)
For reference sync signal input. Input the composite video or composite sync signal.

[VIDEO IN Y/C443] connector (4-pin) (BR-S800E only)
Accepts separate Y/C signals.

❸ Audio output connectors

[AUDIO OUT NORMAL] connectors (RCA)
AUD-1 and AUD-2 normal audio signals are output.

[AUDIO OUT HI-FI] connectors (RCA)
Hi-Fi left/right-channel audio signals are output*.
(*Selectable via Menu switch.)

[AUDIO MONITOR] connector (RCA)
Outputs the audio signal selected with the front panel AUDIO MONITOR switch (☞p.11).

❹ Video output connectors

[VIDEO OUT LINE/MONITOR] connectors (BNC)
Outputs composite video signals. On-screen information is supplied from the MONITOR connector.

[VIDEO OUT Y/C443] connector (4-pin)
Outputs separate Y/C signals.

2 CONTROLS, CONNECTORS AND DISPLAYS

2-2 REAR PANEL

❺ TIMER switch
Selects timer mode when an external timer is connected.

REC (BR-S800E only): The VCR automatically starts recording when power is supplied from the timer.

OFF: No timer operation.

PLAY: The VCR automatically starts playback when power is supplied from the timer.

❻ Expansion slots
A variety of optional boards can be installed here to increase the unit's capabilities.

❼ AC IN socket
Connect to 220 – 240 V AC, 50/60 Hz power outlet using the provided power cord.

MENU SWITCHES

In addition to switches on the front panel, the BR-S800E/BR-S500E incorporate a comprehensive set of Menu switches for more flexible VCR setup.
For setting items related to the functions described on this page, the following Menu switches are available.

Page reference

●Audio input
No.205 AUD-1 REC. 29
No.206 AUD-2/LTC 30
No.207 AUDIO INPUT SELECT 30
No.208 AUD DUB SELECT 29
No.339 A.DUB ENABLE AT LTC 32

●Video input
No.003 SYNC SELECT 28

●Audio output
No.203 AUDIO OUTPUT SELECT 30
No.204 Hi-Fi OUT AT SEARCH 30
No.206 AUD-2/LTC 30

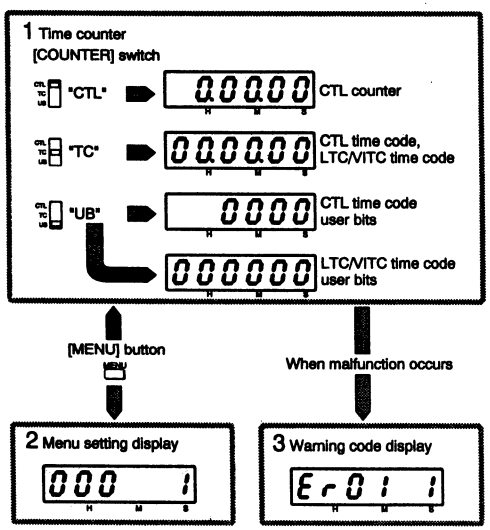
●Servo
No.000 FRAME SERVO 28
No.001 TBC CONNECT 30
No.003 SYNC SELECT 28

●On-screen display
No.500 ON SCREEN DISPLAY 29
No.504 INFORMATION 33

Reference pages
External timer recording p.42
External timer playback p.38

☞ p.56 GLOSSARY: Time code, LTC

2-3 DISPLAYS



Counter display

The BR-S800E/BR-S500E's counter is switchable between the following items.

1 Time counter
The counter usually functions as a tape time counter. If the MENU button is pressed, the counter changes to the Menu switch setting mode.

2 Menu setting display
For Menu switch setting. After setting Menu switches, press the MENU button to return to the tape time counter.

3 Warning code display
If a malfunction occurs, the corresponding numerical warning code is automatically displayed.

Time counter display
If the repeat playback start or end point has been set, the counter shows the start or end point when the IN+SHIFT or OUT+SHIFT button is pressed. (Setting the COUNTER switch to either "CTL" or "TC" is required.)

Reference pages
Menu switch setting p.24
Warning code display p.51

2-3 DISPLAYS

On-screen displays

On-screen information is available only via the rear panel VIDEO OUT MONITOR connector.

The following four display modes are available.

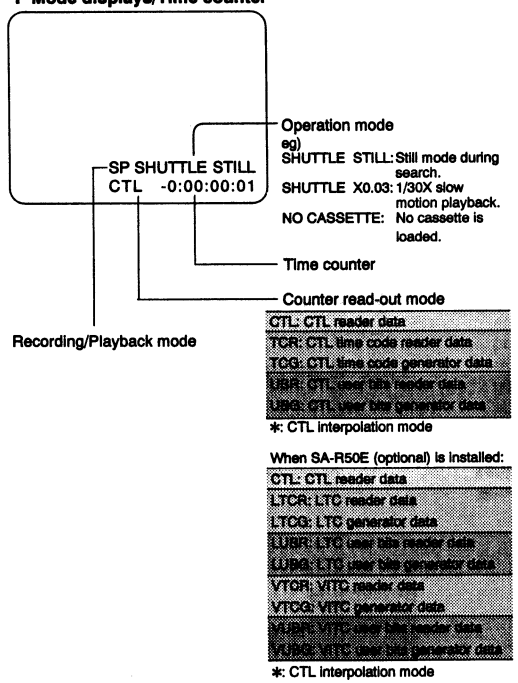
1 Mode displays/Time counter
Normal on-screen display. Time counter shows counter read-out data in hours, minutes, seconds, and frames. If the MENU button is pressed, the display changes to the Menu switch setting mode.
NOTE:
Due to the characteristics of the CTL time code, any discontinuity in existing CTL time code data (including user bits) during playback may result in an incorrect counter display reading for about two seconds at the point where the data changes.

2 Menu setting display
For Menu switch setting. After setting Menu switches, press the MENU button to return to the normal on-screen display.

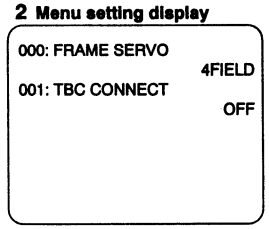
3 Hour meter data display
In the Menu setting mode, hour meter data is shown with Menu switch No.909. (Hour meter data is not displayed on the counter.)

4 Warning code display
If a malfunction occurs, the corresponding warning code is automatically displayed.

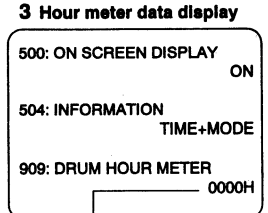
1 Mode displays/Time counter


SP SHUTTLE STILL
CTL -0:00:00:01
Operation mode
eg)
SHUTTLE STILL: Still mode during search.
SHUTTLE X0.03: 1/30X slow motion playback.
NO CASSETTE: No cassette is loaded.
Time counter
Counter read-out mode
Recording/Playback mode
CTL: CTL reader data
TCR: CTL time code reader data
TCG: CTL time code generator data
UBR: CTL user bits reader data
UBG: CTL user bits generator data
*: CTL interpolation mode
When SA-R50E (optional) is installed:
CTL: CTL reader data
LTCR: LTC reader data
LTCG: LTC generator data
UBR: LTC user bits reader data
UBG: LTC user bits generator data
VTCR: VITC reader data
VTCG: VITC generator data
UBR: VITC user bits reader data
UBG: VITC user bits generator data
*: CTL interpolation mode

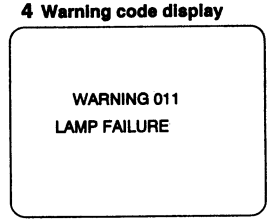
2 Menu setting display



3 Hour meter data display



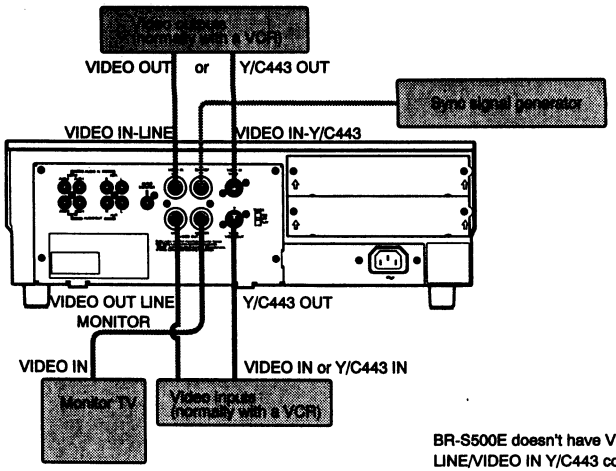
4 Warning code display



Reference pages
Menu switch setting p.24
Warning code display p.51

3 CONNECTIONS

3-1 VIDEO SIGNAL



BR-S500E doesn't have VIDEO IN LINE/VIDEO IN Y/C443 connectors.

Connection with a monitor

On-screen information can only be output from the VIDEO OUT MONITOR connector. So connect a monitor to it.

Y/C 443 connectors

If the units you're connecting to have Y/C 443 connectors, we recommend you use the Y/C connection to make the most of S-VHS picture performance.

Type of connectors

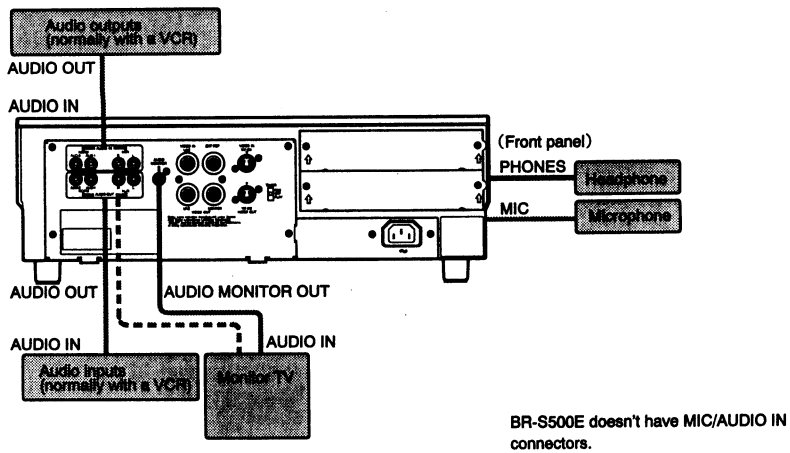
INPUT:	VIDEO IN LINE	BNC
	VIDEO IN Y/C443	4-PIN
	EXT REF	BNC
OUTPUT:	VIDEO OUT LINE/MONITOR	BNC
	VIDEO OUT Y/C 443	4-PIN

Optional cables

A variety of optional cables suitable for different applications are available for Y/C connection.

Model	Connectors on connected units Output	Input	length
VC-G30U	4-pin	4-pin	3 m
VC-G50U	4-pin	4-pin	5 m
VC-G3030U	4-pin	7-pin	3 m
VC-G2030U	7-pin	4-pin	3 m
VC-G2050U	7-pin	4-pin	5 m

3-2 AUDIO SIGNAL



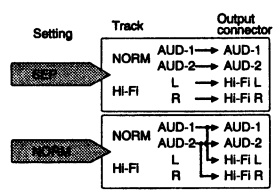
BR-S500E doesn't have MIC/AUDIO IN connectors.

Connection with a monitor

The audio signal output from the AUDIO MONITOR OUT connector is monaural. Select the signal to be output with the front panel AUDIO MONITOR switch (☞p.11).

Menu switch No.203 "AUDIO OUTPUT SELECT" setting

At the factory, the unit is preset to output Hi-Fi audio from Hi-Fi AUDIO OUT and normal audio from NORMAL AUDIO OUT. With Menu switch setting, normal audio can be output both from Hi-Fi AUDIO OUT and NORMAL AUDIO OUT. This is convenient when you want to output two channels of stereo normal audio signals. (☞p.30)

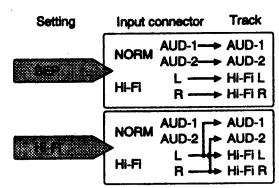


Menu switch No.204 "HI-FI OUT AT SEARCH" setting

With Menu switch setting, normal audio can be output during search or during playback of a tape with no Hi-Fi audio signals. (☞p.30)

Menu switch No.207 "AUDIO INPUT SELECT" setting (BR-S800E only)

At the factory, the unit is preset to record the signal input to Hi-Fi AUDIO IN on the Hi-Fi audio track and the signal input to NORMAL AUDIO IN on the normal audio track. With Menu switch setting, the signal input to Hi-Fi AUDIO IN can be recorded both on the Hi-Fi and normal audio tracks. This is convenient when you want to record the same signal on the Hi-Fi and normal audio tracks. (☞p.30).



Type of connectors

Front panel:

PHONES: ø 3.5 mini-jack (stereo)

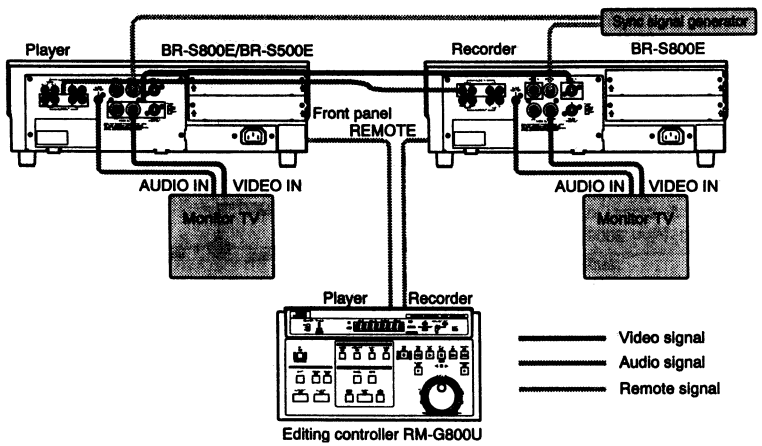
MIC: ø 3.5 mini-jack (monaural)

Rear panel:

All connectors are RCA type.

3-3 EDITING

Connection example when using RM-G800U (optional).
NOTE: When editing, set menu switch No. 337 "SLOW MODE" to "LINEAR".



Editing controller RM-G800U

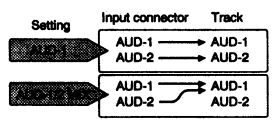
This is a standard editing system in combination with the optional editing controller RM-G800U.

NOTE:
To connect the remote cable, be sure that the power of the VCR is turned off.

External sync signal
By inputting an external sync signal, you can ensure that the Recorder's picture remains stable even when special effects playback is engaged in the Player. Use a composite sync signal or a composite video signal for external sync.

Extension remote cable (optional)
The RM-G800U's cable is about 85 cm long. If you want to extend the cable, use the optional VC-G8030U cable (3 m).

Menu switch No.205 "AUD-1 REC." setting (BR-S800E only)
The signals input to AUDIOIN NORM AUD-1 and AUD-2 can be mixed and be recorded on the audio-1 track. (☞p.29)
To permit later insertion of BGM or narration on the recorder's AUD-2 track, use this setting to mix the player's audio output (AUD-1 and AUD-2) and record both signals on the recorder's AUD-1 track.



NOTES:
When editing with the SR-S368E video cassette recorder, pay attention to the following points.
- Set menu switch No. 03 "SYNCHRONIZATION" of the RM-G800U to "OFF" as the SR-S368E does not have a bumping function.
- Editing accuracy is lowered when preview or goto is used repeatedly.

3-3 EDITING

Editing system with other optional editing controllers

In addition to the RM-G800U, the following editing controllers can also be used in a BR-S800E/BR-S500E editing system. Depending on which controller you use, some optional boards and special settings may be necessary. See below.

With RM-86U:
- SA-K28EA 45-pin interface board.
- Set Menu switches No.330 "VIDEO EDIT DELAY" and No.331 "AUDIO EDIT DELAY" to "4 FRAMES". The RM-86U's edit timing cannot be set to "-4 FRAMES". Set it to "-3 FRAMES". For setting procedures , consult your local JVC dealer.(☞p.32)
- Set Menu switches No.319 "TAPE MAX SPEED" and No.340 "SEARCH SPEED" to "X17". (☞p.32)
- CTL time code editing is not possible.
- Normal audio may overlap for a few frames after the edit-in point.
- Set the RM-86U internal switch to "BUMP OFF". This switch is factory-preset to "OFF". For more details, consult your JVC dealer.

With RM-G810U:
- SA-K28EA 45-pin interface board.
- CTL time code editing is not possible.
- Set the RM-G810U's "EDIT TIMING ADJUSTMENT" to "–8 FRAMES". For setting procedures, consult your local JVC dealer.

With RM-G860E:
- SA-K28EA 45-pin interface board or SA-K26E 9-pin interface board.
- CTL time code editing is possible with the SA-K26E installed. (CTL time code setting is not possible.)
- Set the RM-G860E's "EDIT TIMING ADJUSTMENT" to "–8 FRAMES".
- When "BUMP ON" is set, set editing accuracy to ±1 frame using the SW2-2 and SW2-3 switches on the RM-G860E's system setting panel.

With RM-G870E:
- SA-K26E 9-pin interface board.
- CTL time code editing is possible.
- Set the RM-G870E's "EDIT TIMING ADJUSTMENT" to "–8 FRAMES".

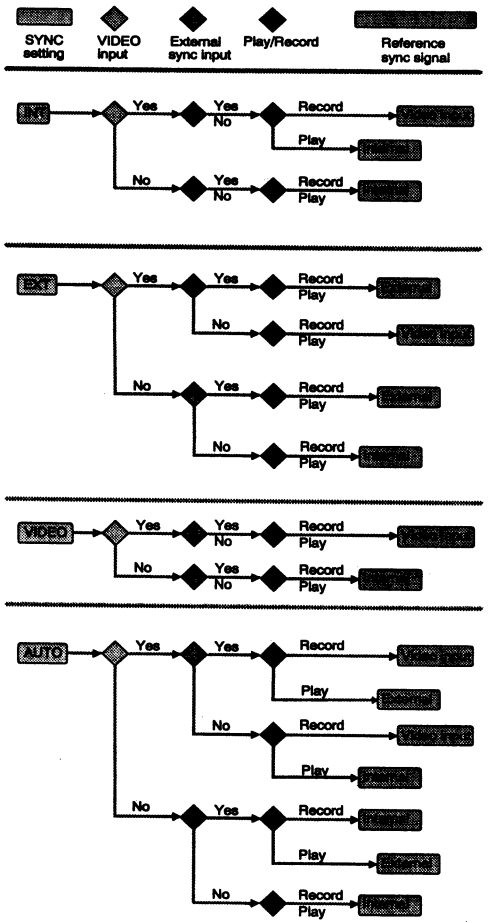
When LTC/VITC (EBU) time code is required:
- SA-R50E time code reader/generator board. When installing the SA-R50E, the SA-K50E adapter board is necessary. When installing the SA-R50E by attaching it to the SA-K26E, the SA-K50E is not necessary.

When connecting to a computer:
- SA-K27EA RS-232C interface board.
- Use "cross-type" RS-232C cable to connect the SA-K27EA with a computer.

Reference pages
Optional accessories p.55

3-4 REFERENCE SYNC SIGNALS SETTING

In this flowchart, the "Record" operation applies not only to the actual record or edit mode, but also to the condition existing when the tally lamp lights after selection of the edit mode (assemble, insert) on the remote editing controller during playback.



When the RM-G800U remote editing controller is connected, "Play" operation continues even if the edit mode is selected while the play mode is engaged.

Reference sync signals for recording and playback

Sync signal:
A sync signal is essential for stable VCR tape running. Playback and recording are based on the sync signal.

Sync signal variation:
The BR-S800E/BR-S500E can use any of the following types of signal as a reference sync signal.

1. Sync signal generated by the VCR's internal sync signal generator.
2. Input video signal applied to the VIDEO IN connector.
3. External sync signal applied to the SYNC IN connector
4. Advanced sync signal from TBC applied to the SYNC IN connector.

Menu switch related to sync signal setting:
Reference sync signal can be set via Menu switch No.003 "SYNC SELECT". (☞p.28)

Settings

INTERNAL: Locked to the sync signal from the built-in sync signal generator for playback, and locked to the input video signal for recording.

EXTERNAL: Locked to the external sync signal.

VIDEO (BR-S800E only): Locked to the input video signal.

AUTO (BR-S800E only): Locked to the input video signal for recording, and locked to the external sync signal for playback.

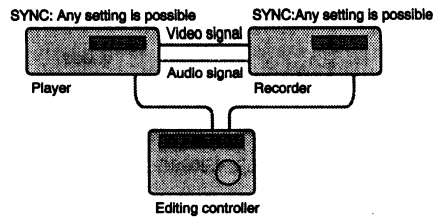
Factory preset:
BR-S800E: "AUTO"
BR-S500E: "INTERNAL"

Sync signal selection structure:
If the sync signal selected via Menu switch above is not supplied, the VCR will choose another signal for sync depending on the situation. This is described in the flowchart at left.

Reference pages
Menu switch setting.....p.25

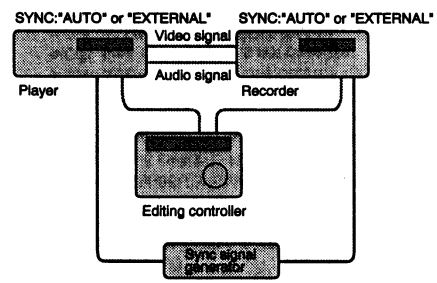
3-4 REFERENCE SYNC SIGNALS SETTING

Guide to reference sync signal setting:

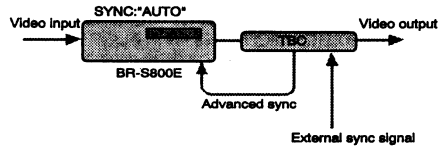


- **Editing system**
  - When external sync is not applied:
    Player: Any setting is possible.
    Recorder: Any setting is possible.

    NOTE: When special effects playback is engaged in the Player, the Recorder's picture may be distorted. This is not a malfunction. To prevent this, use external lock.



  - When external sync is applied:
    Player: "AUTO" or "EXTERNAL".
    Recorder: "AUTO" or "EXTERNAL".



- **Recording/transmission system using an external TBC**
  - BR-S800E:
    When using the BR-S800E for both recording and feeding purposes: "AUTO".
    When using the BR-S800E as a feeder only : "AUTO" or "EXTERNAL".
  - BR-S500E:
    "EXTERNAL".

  NOTE: Set Menu switch No.001 "TBC CONNECT" to "ON". (☞p.30)

Reference pages
Menu switch setting.....p.25

4 MENU SWITCH SETTING

4-1 MENU SWITCH ORGANISATION

Menu switches

In addition to the front panel switches, the BR-S800E/BR-S500E incorporate various On-Screen Menu switches which can be set referring to the monitor screen or counter display. The Menu switch setting data is stored in the VCR's internal memory and remains even after the power is turned off.

Menu switch hierarchy

Levels

Due to the variety and complexity of the setting items available via the Menu switches, the switches have been divided into two levels to simplify easier operation.

Menu switch-1: Switches initially available.
These are switches which may be used more frequently such as normal audio Audio Limiter ON/OFF, Dolby NR ON/OFF, etc.

Menu switch-2: Switches available when Menu switch-1 No.338 "MENU SW 2" is set to "OPEN".
These are switches which may be used less frequently than switch-1. At the factory, Menu switch No.338 "MENU SW 2" is preset to "CLOSE". Set it to "OPEN" to activate switch-2 settings.

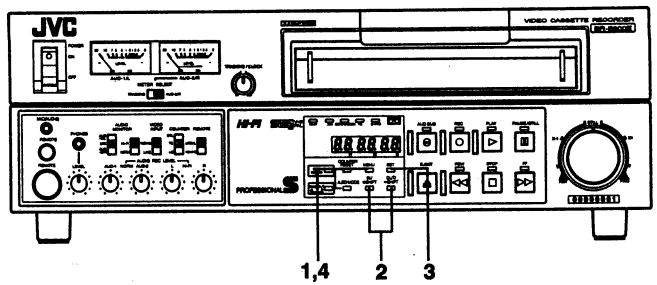
Category

The Menu switches in each level are separated into the following categories as shown at left.

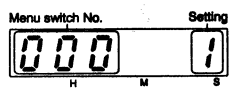
- **Servo**
  Menu switches No.000 — 004
- **Video**
  Menu switches No.100 — 101
- **Audio**
  Menu switches No.200 — 208
- **System**
  Menu switches No.300 — 351
- **On-screen**
  Menu switches No.500 — 504

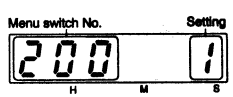
4-2 SETTING PROCEDURE

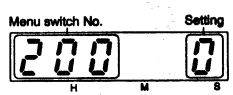
Illustration shows BR-S800E



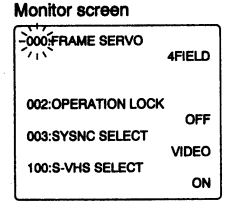
Counter display

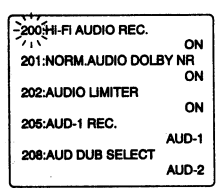


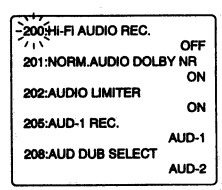




Monitor screen







Hour meter display:
Hour meter data can be displayed only on-screen with Menu switch No.909. It cannot be displayed on the counter.

Operation

1 Engage the Menu switch setting mode.
Press the MENU button.
→ Counter display and monitor screen change to the Menu switch setting mode.

2 Select the switch item to be set.
Press either the IN/+SHIFT or OUT/–SHIFT button to select desired item.
The selected item will start blinking on the monitor screen.

3 Change the setting of the selected item.
Press the SET button to set data as desired.
If you want to set another item, repeat steps 2 to 3.

4 End Menu switch setting.
Press the MENU button. The Counter display returns to the tape counter and the Menu setting display goes off the screen.

4-3 MENU SWITCH LIST

● SERVO		No.	On-screen Description	Explanation	Page
SW-1		000	FRAME SERVO	Frame servo mode selection	28
		002	OPERATION LOCK	Mode lock ON/OFF	28
		003	SYNC SELECT	Reference sync signal selection	28
SW-2		001	TBC CONNECT	TBC ON/OFF (If connected)	30
		004	AUTO H. PHASE	Auto H-phase circuit ON/OFF	30

● VIDEO		No.	On-screen Description	Explanation	Page
SW-1	*	100	S-VHS SELECT	S-VHS recording with an S-VHS tape ON/OFF	28
		101	EDIT SELECT	Recording/playback picture quality selection	28

● AUDIO		No.	On-screen Description	Explanation	Page
SW-1	*	200	HI-FI AUDIO REC.	Hi-Fi audio recording ON/OFF	29
		201	NORM. AUDIO DOLBY NR	Dolby NR ON/OFF for normal audio	29
	*	202	AUDIO LIMITER	Audio limiter ON/OFF for normal audio	29
	*	205	AUD-1 REC.	Signal selection to be recorded on the audio-1 track	29
	*	208	AUD DUB SELECT	Soundtrack selection for audio dubbing	29
SW-2		203	AUDIO OUTPUT SELECT	Selects the signal output from AUDIO OUT	30
		204	HI-FI OUT AT SEARCH	Selects the signal output from AUDIO OUT Hi-Fi during search	30
		206	AUD-2/LTC	Selects the signal to be recorded on the audio-2 track	30
	*	207	AUDIO INPUT SELECT	Selects the signal to be recorded on the AUD-1/2 tracks	30

● SYSTEM		No.	On-screen Description	Explanation	Page
SW-1		338	MENU SW 2	For Menu switch-2 items setting	29
SW-2		300	DIRECT EJECT	Mode selection for Eject	31
		301	DIRECT SEARCH	Mode selection for Search	31
	*	302	AUTO REC. PREROLL	Back space function ON/OFF in the Record-Pause mode	31
	*	304	RECORDING INHIBIT	Inhibits recording on cassettes with safety tab	31
	*	305	REPEAT REC.	Repeat recording ON/OFF	31
		312	MODE AT TAPE END	Mode selection when tape end is detected	31
		319	TAPE MAX SPEED	Maximum tape speed selection for rewind and fast-forward	32
	*	330	VIDEO EDIT DELAY	Delay time selection for video signals at edit point in editing	32
	*	331	AUDIO EDIT DELAY	Delay time selection for audio signals at edit point in editing	32
		337	SLOW MODE	Slow-motion mode selection	32
	*	339	A.DUB ENABLE AT LTC	Audio dubbing on LTC-recorded audio-2 track	32
		340	SEARCH SPEED	Maximum search speed selection	32
		343	SUB WARNING INHIBIT	Mode selection when a malfunction occurs	32
		351	SYNCHRONIZATION	Capstan bump ON/OFF with the editing controller	32

● ON-SCREEN		No.	On-screen Description	Explanation	Page
SW-1		500	ON SCREEN DISPLAY	On-Screen ON/OFF	29
SW-2		504	INFORMATION	Available on-screen information selection	33

*: Not available with BR-S500E.

4-3 MENU SWITCH LIST

A Quick Reference Chart Of Menu Switches

	Menu switch No.338 "MENU SW 2" is "CLOSE". (Initial setting)		Menu switch No.338 "MENU SW 2" is "OPEN".	
SERVO	000	FRAME SERVO	001	TBC CONNECT
	002	OPERATION LOCK	004	AUTO H. PHASE
	003	SYNC SELECT		
VIDEO	100	S-VHS SELECT		
	101	EDIT SELECT		
AUDIO	200	HI-FI AUDIO REC.	203	AUDIO OUTPUT SELECT
	201	NORM. AUDIO DOLBY NR	204	HI-FI OUT AT SEARCH
	202	AUDIO LIMITER	206	AUD-2/LTC
	205	AUD-1 REC.	207	AUDIO INPUT SELECT
	208	AUD DUB SELECT		
SYSTEM	338	MENU SW 2	300	DIRECT EJECT
			301	DIRECT SEARCH
			302	AUTO REC. PREROLL
			304	RECORDING INHIBIT
			305	REPEAT REC.
			312	MODE AT TAPE END
			319	TAPE MAX SPEED
			330	VIDEO EDIT DELAY
			331	AUDIO EDIT DELAY
			337	SLOW MODE
			339	A. DUB ENABLE AT LTC
			340	SEARCH SPEED
			343	SUB WARNING INHIBIT
			351	SYNCRONIZATION
ON SCREEN	500	ON SCREEN DISPLAY	504	INFORMATION

The following Menu switches are available only with the BR-S800E and not with the BR-S500E.

- No.100 S-VHS SELECT
- No.200 Hi-Fi AUDIO REC.
- No.202 AUDIO LIMITER
- No.205 AUD-1 REC.
- No.207 AUDIO INPUT SELECT
- No.208 AUD DUB SELECT
- No.302 AUTO REC. PREROLL
- No.304 RECORDING INHIBIT
- No.305 REPEAT REC.
- No.330 VIDEO EDIT DELAY
- No.331 AUDIO EDIT DELAY
- No.339 A. DUB ENABLE AT LTC

4-4 MENU SWITCH-1 ITEMS

More frequently used switches are available with SWITCH-1.

SWITCH 1 SERVO

No.000 FRAME SERVO

Setting: OFF (0) .....Frame Servo OFF*.
●4FIELD (1) .....Uses Colour frame servo when editing in colour frame servo mode.
2FIELD (2) .....Use frame servo.
Content: Selects the frame servo mode. Normally set to 4FIELD. If the servo is unstable when the following signals are used, set to OFF. Not frame-controlled signals Low video S/N signals after repeated dubbing.
*The setting position "OFF (0)" is not available with the BR-S500E.

No.002 OPERATION LOCK

Setting: ●OFF (0).....Operate lock OFF.
ON (1) .....Operate lock ON.
Content: Activates or defeats mode lock function. Set to ON to lock the VCR in its current mode.
When set to ON: All buttons, switches, and controls are inoperative except menu setting buttons, the METER SELECT switch, PHONES LEVEL control, and the POWER switch.
The TRACKING control and the audio reacording level controls are rendered inoperative. Because the values for these controls are determined by the last-set position, any adjustment made to these controls while the unit is in the operation lock status will take effect the next time off and then on again.. If this happens, set the operation lock to "OFF" and adjust the controls as desired.

No.003 SYNC SELECT

Setting: INTERNAL (0) .....Internal lock.
EXTERNAL (1) .....External lock.
VIDEO (2) .....Input video signal
●AUTO (3) .....Auto switching
Content: Selects the reference sync signal for playback and recording.
INTERNAL: Locked to the internal sync signal.

EXTERNAL: Locked to the external sync signal.

VIDEO: Locked to the input video signal.

AUTO: Locked to the input video signal for recording. Locked to the advanced sync signal from TBC for playback. Use this setting when the unit is used as recorder and a TBC is connected.

For details, ☞p.22.

(For the BR-S500E, only INTERNAL and EXTERNAL are available. Factory preset is INTERNAL.)

SWITCH 1 VIDEO

No.100 S-VHS SELECT

Setting: VHS (0) .....S-VHS recording OFF.
●AUTO (1) ....S-VHS recording ON.
Content: Selects the S-VHS/VHS recording mode when using an S-VHS tape. Set to VHS to record in the VHS mode with an S-VHS tape. When a VHS tape is used, the recording mode is VHS regardless of the setting.

No.101 EDIT SELECT

Setting:● OFF(P.B.) (0)..... Playback with normal picture.
DUB or EDIT (1)....When used as Player in dubbing or editing.
ENHANCED (2).....Playback with sharper picture edges.
Content: Selects the type of playback picture. Set to DUB or EDIT in dubbing or editing to reduce deterioration of picture quality.

●: Factory preset
( ): Display on the counter

4 MENU SWITCH SETTING SETTING PROCEDURE: p.25, MENU SWITCH LIST: p.26

4-4 MENU SWITCH-1 ITEMS

SWITCH 1 AUDIO

No.200 HI-FI AUDIO REC.

Setting: OFF (0).....Hi-Fi audio recording OFF.
●ON (1) .....Hi-Fi audio recording ON.
Content: Activates or defeats Hi-Fi audio recording.

No.201 NORM. AUDIO DOLBY NR

Setting: OFF (0).....Dolby NR OFF.
●ON (1) .....Dolby NR ON.
Content: Activates or defeats Dolby NR circuit for normal audio in recording and playback.

No.202 AUDIO LIMITER

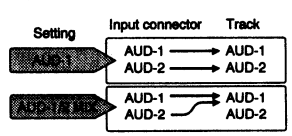
Setting: OFF (0).....Audio limiter OFF.
●ON (1) .....Audio limiter ON.
Content: Activates or defeats audio limiter for normal audio.

No.205 AUD-1 REC.

Setting:●AUD-1 (0) .....Records audio-1 signals.
AUD-1/2 MIX (1) ...Records mixed audio signals.
Content: Selects audio signals to be recorded on the normal audio-1 track.

AUD-1: Audio signals input to AUD-1 are recorded.

AUD-1/2 MIX: Mixed audio signals input to AUD-1 and AUD-2 are recorded. No signal is recorded on the audio-2 track.



When set to "AUD-1/2 MIX", the microphone input signal is mixed with the signal input to the AUD-1 connector and recorded on the AUD-1 track.

No.208 AUD DUB SELECT

Setting: AUD-1 (1) .....Records on the audio-1 track.
●AUD-2 (2) .....Records on the audio-2 track.
AUD-1/2 (3) ...Records on both tracks.
Content: Selects the soundtrack for audio dubbing.
AUD-1: The signal is recorded on the audio-1 track.

AUD-2: The signal is recorded on the audio-2 track.

AUD-1/2: The signal is recorded both on the audio-1 and audio-2 tracks.

To dub a microphone input signal on the AUD-1 track, set this switch to "AUD-1" and set the menu switch No.205 "AUD-1 REC" to "AUD-1/2 MIX".

SWITCH 1 SYSTEM

No.338 MENU SW 2

Setting: ●CLOSE (0)..Menu switch-2 not available.
OPEN (1)....Menu switch-2 available.
Content: Activates or defeats Menu switch-2 items.

CLOSE: Only Menu switch-1 items are available.

OPEN: Both Menu switch-1 and Menu switch-2 items can be set.

SWITCH 1 ON SCREEN

No.500 ON SCREEN DISPLAY

Setting: OFF (0).....On-Screen display OFF.
●ON (1) .....On-Screen display ON.
Content: Activates or defeats On-Screen display via VIDEO OUT MONITOR. On-Screen display is not available via VIDEO OUT LINE or Y/C.

4-5 MENU SWITCH-2 ITEMS

SWITCH-2 SYSTEM

No.001 TBC CONNECT

Setting: ●OFF (0) .....When TBC is not connected.
ON (1) .....When TBC is connected.
Content: Set to ON when an external TBC is connected.

No.004 AUTO H. PHASE

Setting: OFF (0) .....Auto H-Phase OFF.
●ON (1) .....Auto H-Phase ON.
Content: Activates or defeats Auto H-Phase (automatic horizontal phase lock) circuit. Normally set to ON to reduce picture distortion at the edit point. When executing frame-unit editing repeatedly, set to OFF.

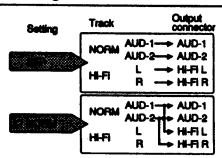
SWITCH-2 AUDIO

No.203 AUDIO OUTPUT SELECT

Setting: ●SEP (0) .....Outputs as labeled.
NORM (2) ...Outputs only normal audio signals.
Content: Selects signals output via rear panel AUDIO OUT connectors.

SEP: To output as labeled: normal audio from AUD-1/AUD-2, Hi-Fi audio from Hi-Fi L/R.

NORM: To output normal audio from all connectors: Hi-Fi L outputs normal audio-1 signal and Hi-Fi R outputs normal audio-2 signal.



No.204 HI-FI OUT AT SEARCH

Setting: ●MUTE (0) ....Outputs muted Hi-Fi audio.
NORM (1) ...Outputs normal audio.
Content: Selects output signals between muted Hi-Fi audio and normal audio via rear panel Hi-Fi AUDIO OUT connectors during search or during playback of a tape with no Hi-Fi audio signals.

No.206 AUD-2/LTC

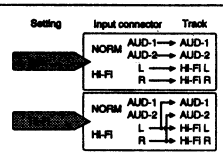
Setting: ●AUD-2 (0) ...Records the audio signal.
LTC (1) .....Records LTC signal.
Content: Selects usage of the audio-2 track either for audio signal recording or for LTC signal recording. When set to "LTC", no audio signal is output from the NORM AUD-2 connector.
Be sure that the VCR is in the Stop mode when switching between AUD-2 and LTC.

No.207 AUDIO INPUT SELECT

Setting: ●SEP (0) .....Records each signal independently.
Hi-Fi (1) .....Records Hi-Fi audio on all tracks.
Content: Selects input signal to be recorded.

SEP: To record each signal on corresponding track: normal audio on AUD-1/AUD-2, Hi-Fi audio on Hi-Fi L/R.

Hi-Fi: To record Hi-Fi audio on all tracks: audio-1 signal is recorded on Hi-Fi L track and audio-2 signal is recorded on Hi-Fi R track.



●: Factory preset
( ): Display on the counter

☞ p.56 GLOSSARY: Auto H-phase, LTC

4-5 MENU SWITCH-2 ITEMS

SWITCH-2 SYSTEM

No.300 DIRECT EJECT

Setting: DISABLE (0) ...Only possible in the Stop mode.
●ENABLE (1) ....Possible in any mode.
Content: Selects modes in which the cassette can be ejected.

DISABLE: Ejection only possible in the Stop mode.

ENABLE: Ejection possible in any mode.

No.301 DIRECT SEARCH

Setting: DISABLE (0) ...Possible in the Still modes.
●ENABLE (1) ....Possible in various modes.
Content: Selects modes to accept dial search.

DISABLE: Dial search is possible in the Still mode.

ENABLE: Dial search is possible in the Still, Play, Stop, REW, and FF modes.

No.302 AUTO REC. PREROLL

Setting: DISABLE (0) ....No preroll operation.
●ENABLE (1) .....Preroll operation.
Content: Activates or defeats back space editing.

DISABLE: Starts recording without prerolling in the Record-Pause or Audio Dub-Pause mode. Picture will be distorted at record-start point.

ENABLE: Starts recording with preroll in the Record-Pause or Audio Dub-Pause mode. Picture won't be distorted.

No.304 RECORDING INHIBIT

Setting: ●OFF (0) .....Normal recording is possible
ON (1) .....Recording is not possible.
Content: OFF: Recording is possible with cassettes with safety tab in place.

ON: Recording is not possible whether there is a safety tab or not. If the VCR is used only as a player, set to ON to prevent misoperation.

No.305 REPEAT REC.

Setting: ●DISABLE (0) ....No repeat recording.
ENABLE (1) .....Engages repeat recording.
Content: Activates or defeats repeat recording.

DISABLE: No repeat recording. The VCR stops recording at tape end. Normally set to this position.

ENABLE: Activates repeat recording. The VCR stops recording at tape end, then rewinds and starts recording again from the beginning of the tape.

No.312 MODE AT TAPE END

Setting: ●S.REW (0) ..Stops at tape end.
REW (1) .....Stops at tape begin after Rewind.
Content: Selects the mode entered when the end of the tape is detected.

S.REW: Rewinds the leader section and enters the Stop mode.

REW: Rewinds to the beginning of tape and enters the Stop mode.

No.319 TAPE MAX SPEED

Setting: ●X140 (0) .....140X normal speed.
X33 (1) .....33X normal speed.
X17 (2) .....17X normal speed.
Content: Selects the maximum tape speed during Rewind and Fast-forward.

X140: Maximum speed is 140X. The remote control counter (optional) does not run if it is connected via 45-pin.

X33: Maximum speed is 33X. The remote control counter (optional) does not run if it is connected via 45-pin.

X17: Maximum speed is 17X.

With S-VHS-C or VHS-C cassette tape, maximum tape speed is 33X (not 140X) normal speed.

4-5 MENU SWITCH-2 ITEMS

SWITCH 2 SYSTEM

No.330 VIDEO EDIT DELAY

Setting: ●8 FRAMES (0) ..... Delays 8 frames.
4 FRAMES (1) ..... Delays 4 frames.
Content: Selects the length of time before video recording starts at the edit point in editing. Normally set to "8 FRAMES". Set to "4 FRAMES" when the VCR is controlled via the RM-86U remote control.

No.331 AUDIO EDIT DELAY

Setting: ●8 FRAMES (0) ..... Delays 8 frames.
4 FRAMES (1) ..... Delays 4 frames.
Content: Selects the length of time before video recording starts at the edit point in editing. Normally set to "8 FRAMES". Set to "4 FRAMES" when the VCR is controlled via the RM-86U remote control.

No.337 SLOW MODE

Setting: LINEAR (0) ..... Linear slow.
●STEP (1) ..... Step slow.
Content: Selects slow-motion playback mode.

LINEAR: Noise bars appear during slow. Normal audio is output during slow. This setting is recommended for editing.

STEP: Noise bars don't appear during slow. No audio is output during slow.

No.339 A. DUB ENABLE AT LTC

Setting: ●DISABLE (0) .... Dubbing is not possible.
ENABLE (1) ..... Dubbing is possible.
Content: Activates or defeats audio dubbing on the audio-2 track with LTC signals.

DISABLE: Audio dubbing is not possible if LTC signals have been recorded on the audio-2 track.

ENABLE: Audio dubbing is possible even though LTC signals have been recorded on the audio-2 track.

When set to "ENABLE" and audio dubbing is executed, prerecorded LTC *signals are erased. If you don't want this,* set Menu switch No.208 "AUD DUB *SELECT" to "AUD-1" to execute audio* dubbing on the audio-1 track.

No.340 SEARCH SPEED

Setting: ●X33 (0) ..... +/– 33X search.
X17 (1) ..... +/– 17X search.
Content: Selects the maximum search speed.

X33: Maximum search speed is +/– 33 times normal when the search dial is turned fully clockwise or counterclockwise. The remote control counter (optional) does not run if it is connected via 45-pin.

X17: Maximum search speed is +/– 17 times normal when the search dial is turned fully clockwise or counterclockwise.

No.343 SUB WARNING INHIBIT

Setting: ●OFF (0) ..... Enters the Warning mode.
ON (1) ..... Enters the Stop or Eject.
Content: Selects the mode entered when a malfunction is detected.

OFF: When a malfunction occurs, the VCR enters the Warning mode and displays a warning code on the counter and the monitor screen. See p.51 for warning codes.

ON: When a malfunction occurs, the VCR either stops or ejects the cassette depending on the nature of the problem. (☞p.51) Warning codes are not available with this setting. For safe operation, do not use this setting unnecessarily.

●: Factory preset
( ): Display on the counter

4-5 MENU SWITCH-2 ITEMS

SWITCH 2 SYSTEM

No.351 SYNCHRONIZATION

Setting: DISABLE (0) .... Rejects Capstan bump.
●ENABLE (1) ..... Accepts Capstan bump.
Content: Accepts or rejects Capstan bump command from the editing controller.

DISABLE: Capstan bump is rejected in editing.

ENABLE: Capstan bump is accepted in editing. Increases editing accuracy.

SWITCH 2 ON SCREEN

No.504 INFORMATION

Setting: TIME (0) ..... Displays time counter.
●TIME+MODE (1) .. Displays time and mode.
Content: Selects the on-screen information to be displayed.

TIME: Time counter data is displayed.

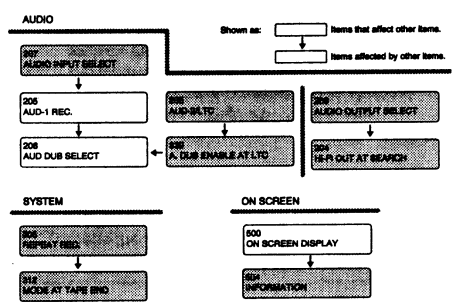
TIME+MODE: Time counter data, operation mode, and search speed are displayed.

●: Factory preset
( ): Display on the counter

4-6 RELATIONSHIP BETWEEN MENU SWITCHES

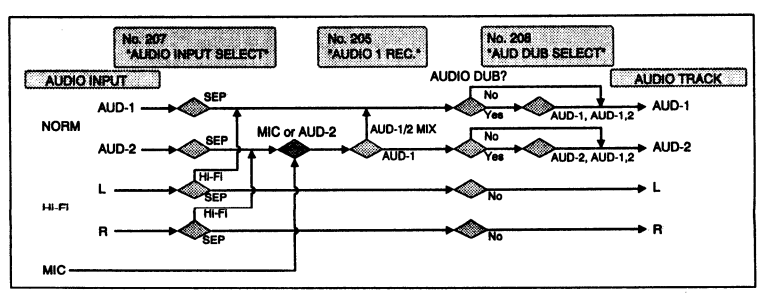
Relationship

Some Menu switches may affect the action of other Menu switches, depending on the settings. The relationship between switches is shown in the chart at right. When setting of a Menu switch does not work as expected, check to see if that setting is affected by other items.



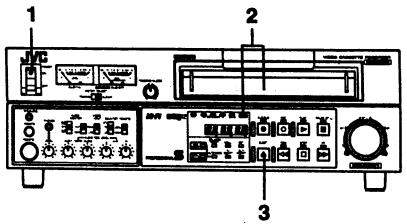
Input audio signal flowchart

The flowchart below describes how each audio input connector functions and shows how Menu switch settings determine on which track the input signal is recorded. A microphone input signal is normally recorded on the AUD-2 track. By setting Menu switch No.205 "AUD-1 REC" to "AUD-1/2 MIX", the MIC input signal can be recorded on the AUD-1 track together with the signal input to the AUD-1 connector.



5 LOADING/UNLOADING

LOADING AND UNLOADING



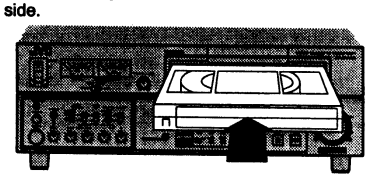
Procedure

1 Turn the power on.

POWER ON OFF Set the POWER switch to ON.

2 Insert a cassette.

Insert the cassette into the cassette loading slot by gently pushing the center of the cassette's label side.



→ The cassette is automatically retracted and loaded.
→ The VCR enters the Stop mode and the "Cassette loaded indicator" lights.

3 Remove a cassette.

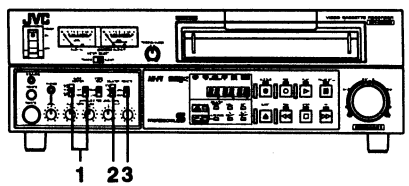
Press the EJECT button.

→ The cassette is automatically ejected.
→ Remove the cassette from the cassette loading slot.

WARNING
- Do not insert fingers or foreign objects into the cassette loading slot. You may hurt yourself or damage the mechanism.
- Do not try to remove the cassette once automatic loading has started.

6 PLAYBACK

6-1 PREPARATION



Front panel switch setting

1 Set the AUDIO MONITOR select switches as required. (☞p.11)

AUDIO MONITOR AUD -1/L MIX AUD -2/R HI-FI NORM

2 Set the COUNTER switch as required. (☞p.12)

COUNTER CTL TC UB

3 Set the REMOTE switch as required. (☞p.12)

REMOTE LOCAL REMOTE

Menu switch setting

Set the following items as required.

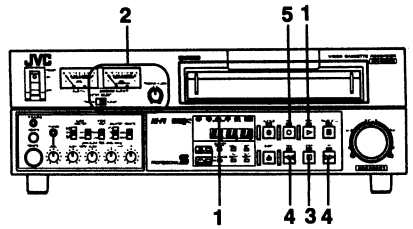
Select reference sync signal:
No.003 "SYNC SELECT" (☞p.28)
Factory preset: "AUTO" (BR-S800E)
"INTERNAL" (BR-S500E)

Select the type of picture:
No.101 "EDIT SELECT" (☞p.28)
Factory preset: "OFF"

Select TBC mode.
No.002 "TBC CONNECT" (☞p.30)
Factory preset: "OFF"
Set to "ON" when an external TBC is connected.

☞ p.56 GLOSSARY: TBC

6-2 BASIC PROCEDURE



Operation

1 Play back a tape.

Press the PLAY button.
→ Starts playback.
→ The SERVO LOCK indicator lights.

SERVO LOCK

2 Adjust the tracking.

METER SELECT TRACKING AUD-2/R Turn the TRACKING control until the tracking meter (AUD-2/R) deflects fully to the right. Make sure that no noise bar appears on the monitor screen. If there is noise on the Hi-Fi audio track, turn the control until the noise is minimised.

AUD-2/R TRACKING / V.LOCK

3 Stop playback.

Press the STOP button.
→ Playback stops.

4 Rewind or fast-forward the tape.

Press the FF button.
→ Starts fast-forward.
Press the REW button.
→ Starts rewind.

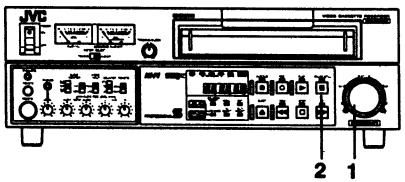
5 Input signal monitoring. (BR-S800E only)

If the REC button is pressed during playback, the input signal can be monitored on screen as long as the button is pressed. Do not press the REC button while pressing the PLAY button, otherwise the VCR enters the Record mode.

Maximum REW/FF speed
Factory preset: 140X normal speed.
→ Other settings (93X, 17X) are possible via Menu switch. (No.319 "TAPE MAX SPEED", ☞p.32)

VCR mode at tape end
Factory preset: Enters the Stop mode at tape end.
→ This is selectable via Menu switch; the VCR automatically rewinds when the end of the tape is reached and then stops. (No.312 "MODE AT TAPE END" ☞p.31)

6-3 SPECIAL EFFECTS PLAYBACK

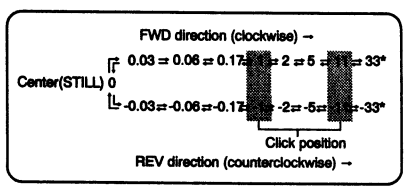


Operation

1 Dial search

Turn the dial while in the Play, Still, Stop, FF, or REW mode. Turn the dial clockwise to search in the forward direction and turn it counterclockwise to search in the reverse direction.

→ Starts search. Search speed varies as shown below (in the Step Slow mode).


FWD direction (clockwise) →
0.03 ⇄ 0.06 ⇄ 0.17 ⇄ 2 ⇄ 5 ⇄ 33*
Center(STILL) 0
-0.03 ⇄ -0.06 ⇄ -0.17 ⇄ -2 ⇄ -5 ⇄ -33*
Click position
REV direction (counterclockwise) →

To end search: Press either of the PLAY, STOP, FF, REW button.

→ The VCR enters the mode corresponding to the button pressed. The dial remains in the same position.

To re-start search: Turn the dial again.

Maximum search speed

The factory preset maximum search speed is 33X. This can be changed to 17X via Menu switch No.340 "SEARCH SPEED". Set to "17" to output CTL signals during search for readout on an optional 46-pin controller. (☞p.32)

DIRECT SEARCH setting

At the factory, Menu switch No.301 "DIRECT SEARCH" is preset to "ENABLE". When it is set to "DISABLE", the Search mode can be [illegible] (☞p.31)

2 Still/Frame advance

Press the PAUSE/STILL button in Play, Stop, FF, or REW mode.

→ Displays a still picture.

Press the PAUSE/STILL button again.

→ Advances the picture one frame at a time.

To resume normal playback: Press the PLAY button.

Slow motion mode setting

Menu switch No.337 "SLOW MODE"
Setting: "STEP" or "LINEAR"
Factory preset: "STEP"
The mode setting for slow-motion playback. The factory preset is set to "STEP" for noiseless slow motion. (☞p.32)

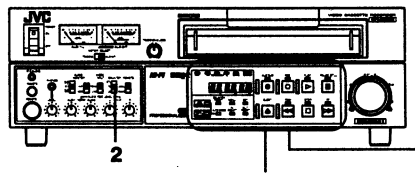
During Slow/Still

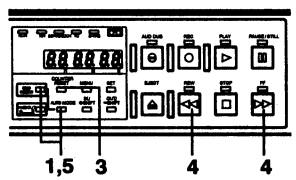
The TRACKING control functions for tracking adjustment during step slow motion playback, and for V.LOCK adjustment of a still picture. The TRACKING control has no effect when Menu switch No.337 "SLOW MODE" is set to "LINEAR".

Long Pause function

The Long Pause mode is automatically engaged for tape protection when the Still mode continues for more than 5 minutes. Long Pause function: The VCR enters the Stop mode. Tape tension is loosened and the drum stops. The On-Screen display indicates STBY-OFF.
To cancel this status: Press any button. The VCR enters the mode corresponding the button pressed.

6-4 COUNTER SEARCH





Operation

1 Engage the Counter Search mode.

AUTO MODE Press the AUTO MODE button to light the Counter Search indicator.

2 Select the counter mode.

COUNTER CTL TC Set the COUNTER select switch to "CTL" or "TC".

3 Designate the position you wish to locate later.

COUNTER RESET Press the COUNTER RESET button at the position you wish to locate later.

→ The counter resets to "00:00:00".

4 Start Counter Search.

Press the FF or REW button while in the Stop mode.

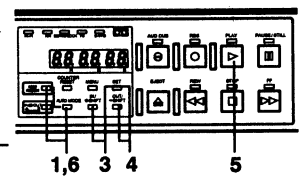
→ Tape will be rewound or fast-forwarded and stop at counter "00:00:00" position.

5 To cancel the Counter Search mode.

AUTO MODE Press the AUTO MODE button. The Counter Search indicator goes off.

When the RM-G800U is connected, counter search and repeat playback are not possible.

6-5 REPEAT PLAYBACK



Operation

1 Engage the Repeat mode.

AUTO MODE Press the AUTO MODE button to light the Repeat mode indicator.

2 Select the counter mode.

COUNTER CTL TC Set the COUNTER select switch to "CTL" or "TC".

3 Enter the repeat-start point.

IN/+SHIFT Press the SET button while pressing the IN/+SHIFT button where you want Repeat playback to start.

SET → Start point is entered. When no start point is entered, repeat playback will start from the beginning of the tape.

4 Enter the repeat-end point.

OUT/–SHIFT Press the SET button while pressing the OUT/–SHIFT button at the point where you want Repeat playback to end.

SET → End point is entered. When no end point is entered, repeat playback will end at the end of the tape.

5 Start repeat playback.

Press the PLAY button.

→ Repeat playback starts between entered start and end points. Press the STOP button to stop repeat playback.

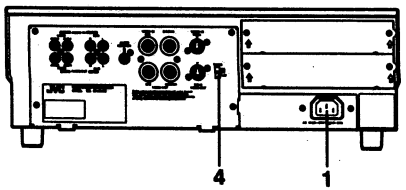
6 To cancel the Repeat mode.

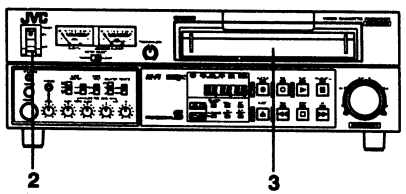
AUTO MODE Press the AUTO MODE button. The Repeat mode indicator turns off.

Repeat playback

The repeat playback start or end point is displayed on the counter for as long as the IN/+SHIFT or OUT/–SHIFT button is pressed. If the COUNTER RESET button is pressed while pressing the IN/+SHIFT or OUT/–SHIFT button, the preset repeat start or end point will be reset.

6-6 EXTERNAL TIMER PLAYBACK





Operation

1 Connect an external timer unit.
Connect it to the AC IN socket. Turn on the external timer.

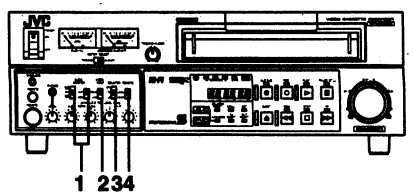
2 Turns the power on.
POWER ON / OFF Set the POWER switch to ON.

3 Load a cassette.
Insert the cassette into the cassette loading slot.

4 Engage the timer playback mode.
TIMER REC / OFF / PLAY Set the TIMER switch to "PLAY".
→ The VCR will automatically start playback when power is supplied from the external timer at the preset time. (The external timer must have been turned off first.)

7 RECORDING

7-1 PREPARATION



Front panel switch setting

1 AUDIO MONITOR select switches
AUDIO MONITOR / NORMAL Set the AUDIO MONITOR select switches as required. (☞p.11)

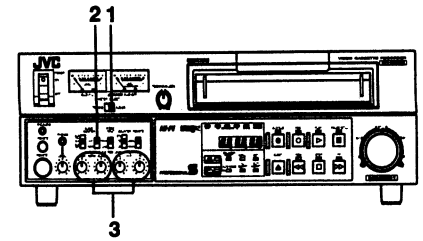
2 VIDEO INPUT select switch
VIDEO INPUT / LINE Select the input video signal to be recorded with the VIDEO INPUT switch. (☞p.11)

3 COUNTER select switch
COUNTER CTL / TC / UB Set the COUNTER switch as required. (☞p.12)

4 REMOTE switch
REMOTE / LOCAL Set the REMOTE switch as required. (☞p.12)

For BR-S500E users
Section 7 describes recording and editing with the BR-S800E. As the BR-S500E is a player, you can skip these sections and go to section 10, p.51.

7-1 PREPARATION



Menu switch setting

Set the following items as required.

●SERVO

Frame Servo setting:
No.000 "FRAME SERVO" p.28
Factory preset: "4FIELD"

Auto H-Phase setting:
No.004 "AUTO H. PHASE" p.30
Factory preset: ON

Reference sync signal setting:
No.003 "SYNC SELECT" p.28
Factory preset: "AUTO"

●VIDEO

VHS recording with S-VHS tapes:
No.100 "S-VHS SELECT" p.28
Factory preset: "AUTO"

The type of picture:
No.101 "EDIT SELECT" p.29
Factory preset: "OFF"

●AUDIO

Hi-Fi audio recording:
No.200 "HI-Fi AUDIO REC" p.29
Factory preset: "ON"

Dolby NR for normal audio:
No.201 "NORM. AUDIO DOLBY NR" p.29
Factory preset: "ON"

Audio limiter for normal audio:
No.202 "AUDIO LIMITER" p.29
Factory preset: "ON"

Mixed audio recording on audio-1 track:
No.205 "AUD-1 REC" p.29
Factory preset: "AUD-1"

Hi-Fi audio recording on normal audio tracks:
No.207 "AUDIO INPUT SELECT" p.30
Factory preset: "SEP"

Audio recording level adjustment

1 Switch the AUD-2/R meter for level indication.
METER SELECT / TRACKING / AUD-2/R Set the METER SELECT switch to "AUD-2/R".

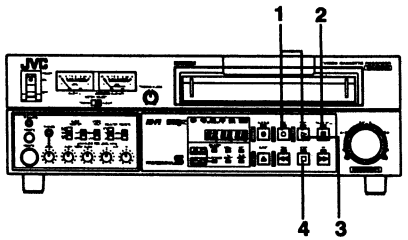
2 Select indication mode.
Set the AUDIO MONITOR switch to "Hi-Fi".
AUDIO MONITOR / HI-FI / NORMAL
→ Hi-Fi audio level is displayed.
Set the AUDIO MONITOR switch to "NORMAL"
→ Normal audio level is displayed.

3 Adjust the level.
Adjust the audio level with the AUDIO REC LEVEL control corresponding to the signal selected with the AUDIO MONITOR switch.
→ Turn the control until the meters deflect to "0" at peak signal level.

When engaging the Record mode directly from the Play mode, set Menu switch No.003 "SYNC SELECT" to "VIDEO". This can help reduce picture distortion at the record-start point.

☞ p.56 GLOSSARY: Frame servo, Auto H-phase, Dolby NR, Audio limiter

7-2 BASIC PROCEDURE



Operation

1 Start recording

Press the PLAY button while pressing the REC button.

→ Both the REC and PLAY indicators light and recording will start.

2 Temporarily stop recording.

Press the PAUSE/STILL button.

→ The PAUSE/STILL indicator lights and recording is paused.

3 Re-start recording.

Press the PLAY button.

→ The PAUSE/STILL indicator turns off and recording is re-started.

Auto Back Space Editing

Auto back space editing function: This function helps prevent picture distortion at edit points in recording.

System: When the PAUSE/STILL button is pressed during recording, the tape rewinds by about 5 seconds and stops in the Record-Pause mode. When recording is re-started by pressing the PLAY button, recording does not take place for about 3 seconds (the input signal is output to the monitor and the operation mode display on the monitor screen blinks for this period.) and re-starts at the position where the PAUSE/STILL button was pressed. The operation mode display on the monitor screen stops blinking.

Setting: Menu switch No.302 "AUTO REC. PREROLL" (☞p.31)

Factory preset: "ON"

When set to "OFF", response time for mode switching (Record→Record-Pause→Record) will be faster, however picture will be distorted at edit points.

4 Stop recording.

Press the STOP button.

→ The REC and PLAY indicators turn off and recording will stop.

CTL time code recording

- CTL time code is automatically recorded on the CTL track whenever recording is executed immediately after the tape has been rewound to the beginning.
- In this case, the time code is recorded from the value "00H 00M 00S" and the user bits are recorded as "00 00".
- If recording is stopped or paused, CTL time code recording will not restart when recording is restarted.

VHS recording with an S-VHS tape

Set Menu switch No.100 "S-VHS SELECT" to "VHS". (☞p.28)

Long Pause function

To protect the tape, the Long Pause function is automatically engaged when the Record-Pause mode continues for more than 5 minutes.

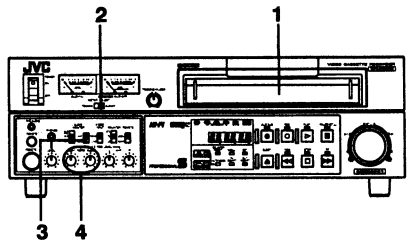
Long Pause function: The VCR enters the Stop mode. Tape tension is loosened and the drum stops. The operation mode display on the monitor screen changes to "STBY-OFF".

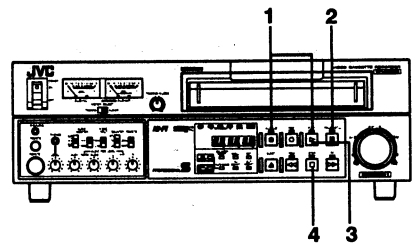
To cancel this status: Press any button. The VCR enters the mode corresponding to the button pressed.

If PLAY is pressed during recording:

Recording is canceled and playback starts.

7-3 AUDIO DUBBING





Preparation

Menu switch setting

Soundtrack selection: (☞p.29)

Menu switch No.208 "AUD DUB SELECT"
Factory preset: "AUD-2"

Audio dubbing is possible on either the audio-1 track or both audio-1 and audio-2 tracks.

When dubbing on audio-2 track, set Menu switch No.206 "LTC SELECT" to "AUD-2" (factory preset).

1 Load a cassette.

Insert a cassette with safety tab in place into the cassette loading slot.

2 Switch the AUD-2/R meter for level indication.

METER SELECT TRACKING AUD-2/R

Set the METER SELECT switch to "AUD-2/R".

3 Select indication mode for normal audio.

AUDIO MONITOR AUD-1/L MIX AUD-2/R HI-FI NORM

Set the AUDIO MONITOR switch to "NORMAL".

4 Adjust the level.

Adjust the audio level with NORMAL AUDIO LEVEL NORM control.

→ Turn the control until the meters deflect to "0" at peak signal level.

Procedure

1 Engage audio dubbing.

Press the PLAY button while pressing the AUD DUB button in the Play or Still mode.

→ Both the AUD DUB and PLAY indicators light and audio dubbing starts.

2 Temporarily stop audio dubbing.

Press the PAUSE/STILL button.

→ The PAUSE/STILL indicator lights and audio dubbing is paused.

3 Re-start audio dubbing.

Press the PLAY button.

→ The PAUSE/STILL indicator turns off and audio dubbing is re-started.

Some noise bars may appear in the still picture or the picture may roll up and down at this time. This increases switching precision and is not a malfunction.

4 Stop audio dubbing.

Press the STOP button.

→ The AUD DUB and PLAY indicators turn off and tape stops.

Auto Back Space Editing Function

As with the Record mode, this function is also available in the Audio Dubbing mode.

Setting: Menu switch No.302 "AUTO REC. PREROLL" (☞p.31)

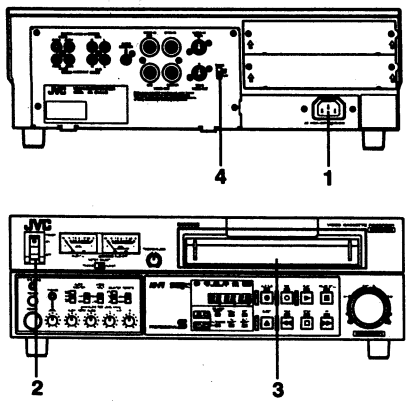
Factory preset: "ON"

When set to "OFF", response time for mode switching (Record→Record-Pause→Record) will be faster, however sound will be distorted at edit points.

If PLAY is pressed during audio dubbing:

Audio dubbing is canceled and playback starts.

7-4 EXTERNAL TIMER RECORDING



Operation

1 Connect an external timer.
Connect it to the AC IN socket. Turn on the external timer.

2 Turn the power on.
POWER ON / OFF Set the POWER switch to ON.

3 Load a cassette.
Insert a cassette with safety tab in place into the cassette loading slot.

4 Engages the timer recording mode.
- Set the TIMER switch to "REC". (Leave the VCR in the Stop mode. Do not press any other button such as PLAY or REC.)
- Make necessary settings on the external timer.

→ The VCR will automatically start recording when power is supplied from the external timer at the preset time. (The external timer must have been turned off first.)

7-5 REPEAT RECORDING

Operation

1 Engage the Repeat mode.
Set Menu switch No.305 "REPEAT REC." to "ENABLE". (☞p.31)

2 Start repeat recording.
Start recording referring to the procedure described in the "RECORDING — BASIC PROCEDURE". (☞p.40)
→ Repeat recording starts.
→ The VCR will automatically rewind the tape at the tape end start recording again from the beginning of the tape.

8 EDITING WITH RM-G800U (option)

8-1 EDITING CONTROLLER

In combination with an optional editing controller, the BR-S800E can be used in an automatic video/audio editing system. Connectable controllers are listed below.

Editing controller RM-G800U

This controller is designed exclusively for the BR-S800E.
- One player and one recorder can be connected.
- CTL time code setting is possible.
- Can be connected to the BR-S800E without any interface board.

Editing controller RM-G860E

This controller is designed for use with most professional VCRs.
- Two players and one recorder can be connected.
- CTL time code setting is not possible.
- To connect to the BR-S800E, the optional SA-K26E RS-422 interface board or the optional SA-K28EA 45-pin interface board is necessary.

Editing controller RM-G870E

This controller is designed for use with most professional VCRs.
- Can store data for up to 127 edit events.
- Two players and one recorder can be connected.
- CTL time code setting is possible.
- To connect to the BR-S800E, the optional SA-K26E RS-422 interface board is necessary.

Editing controller RM-G810U/RM-G86U

This controller is designed for use with most professional VCRs.
- One player and one recorder can be connected.
- CTL time code setting is not possible.
- To connect to the BR-S800E, the optional SA-K28EA 45-pin interface board is necessary.

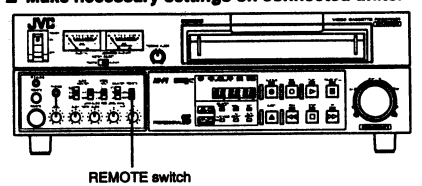
This manual explains editing procedures using the RM-G800U. For procedures using other controllers, refer to the instructions supplied with the controller.

Editing System
To configure an editing system, it is necessary to have a playback VCR (such as the BR-S500E), a recording VCR (such as BR-S800E), and an editing controller.

8-2 PREPARATION

1 Connect necessary components correctly.
(See "CONNECTIONS" ☞p.20)

2 Make necessary settings on connected units.



■ For Player VCR (BR-S800E or BR-S500E)
REMOTE / LOCAL Set the REMOTE switch to REMOTE.
→ See p.34 for other settings.

■ For Recorder VCR (BR-S800E)
REMOTE / LOCAL Set the REMOTE switch to REMOTE.
→ See p.38 for other settings.

■ For RM-G800U
Set menu settings as desired while referring to the monitor (connected to the recorder VCR's VIDEO OUT MONITOR connector). Refer to the RM-G800U's instruction manual for details.

NOTE
When using the CTL time code setting with the BR-S800E/BR-S500E's colour frame servo set to ON and capstan bump set to ON, set "PREROLL TIME" to 10 seconds (or more) with the editing controller.

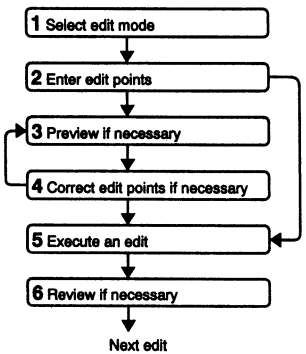
Slow motion mode setting
Menu switch No.337 "SLOW MODE"
Setting: "STEP" or "LINEAR"
Factory preset: "STEP"
The mode setting for slow-motion playback. The factory preset is set to "STEP" for noiseless slow motion. For editing, we recommend that you set the slow-motion mode to "LINEAR" for the following reasons.
1: Though noise appears during slow-motion playback, it is easier to identify the transition point of frames.
2: Normal audio can be output during slow-motion playback. (☞p.32)

☞ p.56 GLOSSARY: CTL time code

8-3 PROCEDURE

Operating flowchart

Editing procedures can be summarised as follows:


1 Select edit mode
2 Enter edit points
3 Preview if necessary
4 Correct edit points if necessary
5 Execute an edit
6 Review if necessary
Next edit

1 Select edit mode
Select either assemble editing or insert editing

2 Enter edit points
Enter both edit-in and -out points.

3 Preview if necessary
Perform "rehearsal" editing to confirm that the entered edit-in and -out points are appropriate. This is referred to as "Preview".

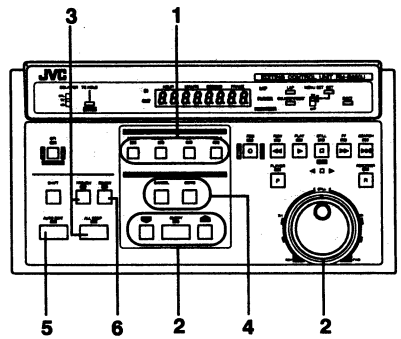
4 Correct edit points if necessary
Entered edit points can be corrected.

5 Execute an edit
After entering edit points, perform editing. This is referred to as "Executing an edit".

6 Review if necessary
After executing an edit, you may want to rewind and check the quality of the transition between edit points. This is referred to as "Review".

Proceed with editing by repeating the procedures

Procedure



1 Select edit mode.

ASSEM
To perform assemble editing, press ASSEM.

VIDEO/HI-FI
To perform insert editing, select the track you're going to replace by pressing either VIDEO/Hi-Fi or AUD-1 or AUD-2.

AUD-1
VIDEO/HI-Fi: Prerecorded video and Hi-Fi audio track is replaced by new material.
AUD-1: Prerecorded normal audio-1 track is replaced by new material.

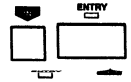
AUD-2
AUD-2: Prerecorded normal audio-2 track is replaced by new material.

2 Enter edit points.
Set edit-in point for each VCR (Player/Recorder) and set edit-out point for either Player or Recorder.

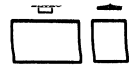
PLAYER
Press "P" to set data for Player and press "R" to set data for Recorder.
Locate desired edit point using JOG/SHUTTLE controls.

RECORDER

To enter edit-in point, press ENTRY while pressing IN.



To enter edit-out point, press ENTRY while pressing OUT.



☞ p.56 GLOSSARY: Assemble editing, Insert editing

8-3 PROCEDURE

3 Preview if necessary.

PREVIEW
Press the PREVIEW button to check transition between edit points before executing an actual editing.
→ The Recorder and Player start to run as they would in actual editing, and then enter the Still mode.

ALL STOP
To quit during preview editing, press the ALL STOP button.

4 Correct edit points if necessary.
Entering a new edit point automatically cancels the previous edit point.

To confirm the picture at the edit point: Press the

GOTO
GOTO button while pressing the IN or OUT button.
→ The VCR accesses the designated edit point and enters the Still mode.

To cancel an edit point without entering a new one:

CANCEL
Press the CANCEL button while pressing the IN or OUT button.

To correct edit points more precisely: Turn the JOG dial while pressing the IN or OUT button.

5 Execute the edit.

AUTO EDIT
Press the AUTO EDIT button.
→ Automatic editing is executed.

6 Review if necessary.

REVIEW
Before you enter new edit points for next edit, press REVIEW.
→ Recorder automatically plays back the last executed.

For details about editing using the RM-G800U, refer to the RM-G800U's instruction manual.

Though a picture may be distorted on the monitor at the edit-in or -out point while in the preview or automatic editing modes, the actual transition is not affected and edited pictures will be normal.

VCR operation during editing

1. Both Feeder and Recorder preroll.
2. Both Feeder and Recorder start playback.
3. Recorder's mode changes to Record at the edit-in point.
4. Ends editing at the edit-out point.
   In assemble editing: Recorder keeps recording after the edit-out point for about 2 seconds.
   In insert editing: Recorder's mode switches to playback and runs for about 2 seconds.
5. Both Feeder and Recorder return to the edit-out point and enter the Still mode. (If RM-G800U Menu Item #01 "OUT POINT RETURN" is set to "00".)

To stop editing while editing is in progress:
Press ALL STOP. Editing stops at the point where the button is pressed.

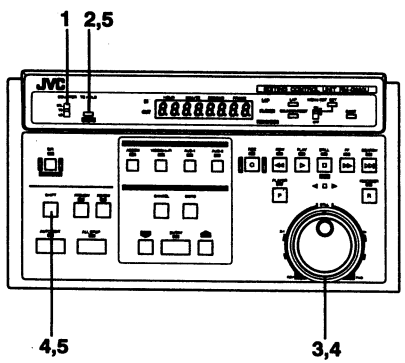
8-4 TIME CODE SETTING

Preparation

■ To use VITC or LTC time codes, you must first install the optional time code generator/reader SA-R50E.

■ Optional boards are not required when using CTL time codes.

■ Put the Recorder in the Stop mode.



NOTE:

- When recording data preset with CTL time code, execute assemble editing or time code insert, or engage the REC mode after tape-begin has been detected.

Procedure

1 Select time code or user bits to be set.

COUNTER — CTL / TC / UB

Set the COUNTER switch of both Recorder and the RM-G800U to either TC or UB as desired.
TC: To set time code.
UB: To set user bits.

2 Set the time code/user bits setting mode.

TC HOLD

Press the TC HOLD button.
→ The leftmost digit on the counter will start blinking.

3 Enter the value for blinking digit.

Turn the JOG dial.
→ The value of the blinking digit changes. Set as desired.

4 Move to another digit.

SHIFT

Press the SHIFT button.
→ Blinking digit moves to right each time the button is pressed.

Repeat steps 3 — 4 until all data is set.

5 Transfer entered data.

SHIFT + TC HOLD

Press the TC HOLD button while pressing the SHIFT button.
→ Entered data is transferred to the Recorder.
→ Counter stops blinking.

Checking of time code data transferred to the recorder

Press the REC button while the VCR is in the Stop or Still mode, or when no cassette is inserted.
→ Preset data is displayed on the counter.

CTL time code user bits setting

CTL time code user bits are certified by 4 digits. The last 4 digits ("SECOND" and "FRAME") are used for CTL time code user bits. Although you can set values for "HOUR" and "MINUTE", those values will no longer be effective when transferred.

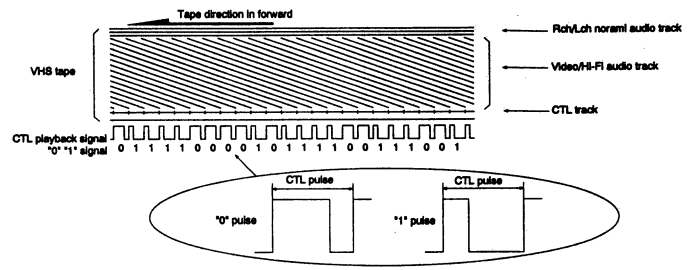
After transferring the CTL time codes, you can delete recording based on the preset CTL time code data by switching the COUNTER switch to "CTL" then back to "TC".

☞ p.56 GLOSSARY: VITC, LTC, CTL time code, User bits

9 CTL TIME CODE

9-1 What Is CTL Time Code?

CTL time code is based on CTL signals. By modulating the duty proportion of CTL signals, "0" and "1" signals (bits) are generated. These signals are used to denote time data and user bits data. One item of data is made up of one 2-second CTL signal containing 50 bits. Time data is indicated by 6-digit time information (hours, minutes, seconds) and user bits data is indicated by 4-digit hexadecimal values(0-9,A-F). Each item of CTL time code data is generated every 2 seconds. Frame addresses in between are interpolated with the CTL pulse. This makes it possible to denote the time code with frame-units accuracy. Thus, frame-accurate editing and cue-up are possible using the CTL time code system.


Tape direction in forward
VHS tape
Rch/Lch normal audio track
Video/Hi-Fi audio track
CTL track
CTL playback signal "0" "1" signal
0 1 1 1 1 0 0 0 0 1 0 1 1 1 1 1 0 0 1 1 1 0 0 1
CTL pulse
CTL pulse
"0" pulse
"1" pulse

9-2 CTL Time Code Recording

■ While CTL time code recording is in progress, the interpolation mark "✳" on the monitor screen turns off.

To record with the time code data "00:00:00:00" from the beginning of a tape.

- This can be done with either the BR-S800E or RM-G800U.

(1) Set the BR-S800E's REMOTE switch.
- When controlling operations with the BR-S800E: Set to "LOCAL".
- When controlling operations with the RM-G800U: Set to "REMOTE".

(2) Set the COUNTER switch to "TC" or "UB".

(3) Rewind the tape to the beginning.

(4) Press the PLAY button while pressing the REC button to start recording.
→ Time code data is recorded from the value "00:00:00:00".
→ User bits data is recorded as "0000".

NOTE:
- Do not engage the Record mode until tape-begin has been detected. CTL time code recording is not possible from any point part way through the tape.
- If the Record-Pause or Stop mode is engaged during recording, CTL time code and user bits data will no longer be recorded.

To record time code that follows after existing CTL time code data on the tape.

- This can be done with either the BR-S800E or RM-G800U.

(1) Select the BR-S800E's REMOTE switch as desired.

(2) Set the COUNTER switch to "TC" and start playback.
- Make sure that the interpolation mark "*" turns off on the monitor screen during playback.

(3) Engage the Record mode directly from the Play mode by pressing the REC and PLAY buttons together.
→ Time code data is recorded following from the existing data.
→ User bits data remains the same.

9-3 Assemble Editing/Time Code Insertion

CTL time code assemble editing or time code insert must be done with the RM-G800U.

- Set the BR-S800E's REMOTE switch to "REMOTE".
- Set the RM-G800U's Menu switch No.00 "PREROLL TIME" to "5 SECONDS" or longer.
  Set "PREROLL TIME" to 10 seconds (or more) when the colour frame servo and capstan bump are set to ON.
- When editing from the beginning of the tape, first run the tape for a period longer than the preroll time before executing the edit.

To edit with time codes that follow the existing CTL time code data.

("Regen" mode)

(1) Set the COUNTER switch to "TC" and start playback. Check that the interpolation mark "*" turns off on the monitor screen.

(2) Execute assemble editing or time code insert.
- For editing procedures, refer to the RM-G800U's instruction manual, sections 6-2 and 6-4.
→ Time code data is recorded following after the existing time code data.
→ User bits data remains the same.

CTL time code insertion
- To set the CTL time code insert mode, press the AUD-2 button while pressing the SHIFT button.
- To start insertion, press the AUTO EDIT button. Press the ALL STOP button to stop insertion.

To record with preset time code data.

(1) Preset the time code data.
- For setting procedures, refer to page 46.

(2) Execute assemble editing or the time code insert.
→ Time code data is recorded starting with the preset value.
→ User bits data is recorded as preset.

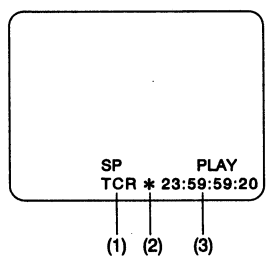
NOTE:
When only time code data has been preset, the user bits data is determined at the value in the Regen mode for recording (or vice versa).

9-4 Time Code Playback

CTL time code can be played back with either the BR-S800E/BR-S500E or the RM-G800U.

- Set the COUNTER switch to "TC" or "UB" and start playback.
  TC: Time code playback.
  UB: User bits playback.
- Possible playback speed: X1 to X11 for both forward and reverse search.
- Interpolation mode
  If there is an error in the CTL time code readout during playback, time code is interpolated with the control signals. In this case, the interpolation mark "*" is displayed on the monitor screen.
  The interpolation mark "*" is not displayed in the following cases.
  - When time data is being read every 2 seconds and frames in between are interpolated with CTL signals.
  - When a loss of data is only one item (2 seconds) during continuous time codes.

9-5 On-Screen Display



(1) CTL time code counter mode
Displayed in recording or playback.
TCR: CTL time code reader data
UBR: CTL time code user bits reader data

Displayed only when checking preset data.
TCG: CTL time code generator data
UBG: CTL time code user bits generator data

(2) Interpolation mark
During playback → "*" is displayed in the interpolation mode.
During recording → No display during time code recording.

(3) Counter display
Time data: 24-hour mode, 8-digit display (Hours, Minutes, Seconds, Frames)
User bits data: 4-digit display with hexadecimal numbers. It is only possible to set the last 4 digits of the 8 digits user bits.

9-6 Menu Switches

When the optional VITC/LTC generator/reader SA-R50E is installed, set the Menu switch No.418 of the BR-S800E/BR-S500E to select the type of time code either VITC/LTC or CTL TC.

Menu switch No.418 "VITC/LTC, CTL TC
CTL TC (1) — Selects CTL TC.
- VITC/LTC (0) — Selects VITC/LTC.

●: Factory preset

9-7 Special Notes

(1) **CTL time code Recording/Playback is not possible in less than 6 seconds.**
Because each CTL time code data item is formed in 2 seconds, it is necessary to run the tape for more than 6 seconds to readout the data. When playing back a tape for less than 6 seconds, or a when playing a tape on which CTL time code has been recorded for less than 6 seconds, correct data readout is not possible.

(2) **Bit loss at the edit points**
When assemble editing/time code insertion has been executed, information in the vicinity of the 8th bit will be lost. However, time information between edits is not interrupted.

(3) **A tape with discontinuous time codes may not edit or cue up correctly.**
If there is any discontinuity in recorded time codes, a malfunction may occur in editing or cue-up. When a tape contains such time codes, insert continuous time codes before using it.

(4) **Preroll time must not be less than 5 seconds.**
When preroll time is set to less than 5 seconds in the Regen mode, editing may be executed before reading of the recorded time codes has been completed. In this case, the Regen mode won't work correctly.

(5) **Editing from the beginning of a tape**
When editing from the beginning of a tape, be sure to run the tape for long enough to allow the time code to be read correctly.

(6) **User bits data that should not be used.**
If any of the following combinations of characters are used for user bits, errors may occur in data reading.

0FF8, 0FF9, 0FFA, 0FFB
1FF0, 1FF1, 1FF2, 1FF3, 1FF4, 1FF5, 1FF6, 1FF7
2FF8, 2FF9, 2FFA, 2FFB
3FE*
4FF8, 4FF9, 4FFA, 4FFB
5FF0, 5FF1, 5FF2, 5FF3, 5FF4, 5FF5, 5FF6, 5FF7
6FF8, 6FF9, 6FFA, 6FFB
7FC*, 7FD*
8FF8, 8FF9, 8FFA, 8FFB
9FF0, 9FF1, 9FF2, 9FF3, 9FF4, 9FF5, 9FF6, 9FF7
AFF8, AFF9, AFFA, AFFB
BFE*
CFF8, CFF9, CFFA, CFFB
DFF0, DFF1, DFF2, DFF3, DFF4, DFF5, DFF6, DFF7
EFF8, EFF9, EFFA, EFFB
*3FE, *7FC, *7FD, *BFE

192 variations in total. *: Any value of hexadecimal numbers.

(7) CTL time code may not be recorded correctly in the assemble editing/time code insertion modes if edit duration has been set to less than 6 seconds. In this case, after all edit procedures have completed, execute the CTL time code insertion again from the beginning.

10 IN CASE OF DIFFICULTY

10-1 WARNING DISPLAY

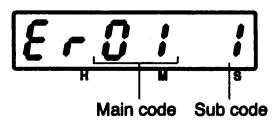
Warning displays

Various warning displays are available to indicate malfunctions. Warnings are shown by numerical codes on the counter and worded messages on the monitor screen.

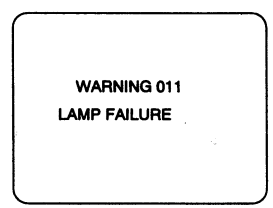
A warning code consists of a 2-digit main code which indicates the general content of the warning and 1-digit sub code which indicates the specific nature of the problem.

Measure: When the warning display appears, take appropriate action as described below. If the problem persists, consult your local JVC dealer.

Warning display on the counter



Warning display on screen



Warning codes

WARNING CODE: 011
On-screen: LAMP FAILURE

Symptom: Tape-begin/end sensor LED burns out.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: 021
On-screen: CONDENSATION ON DRUM

Symptom: Moisture condensation on drum.
Operation: 1. The cassette is ejected.
2. Drum starts rotating and cassettes cannot be loaded.
3. After condensation has been eliminated, the display goes off and cassettes can be loaded.
Solution: Wait until the displays turn off. Do not turn off the power.

WARNING CODE: 081
On-screen: SUP TENSION FAILURE

Symptom: Abnormal tape tension.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: IEO
On-screen: LP INVALID ERROR

Symptom: LP-recorded tape is inserted.
Operation: The Stop mode is engaged. All controls are operative.
Solution: Insert an SP-recorded tape.

WARNING CODE: 321
On-screen: FAILURE IN LOADING

Symptom: Tape cannot load correctly.
Operation: Tape unloads and the cassette is ejected.
Solution: Insert the cassette again or try another cassette.

WARNING CODE: 331
On-screen: FAILURE IN UNLOADING

Symptom: Tape cannot unload.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

10-1 WARNING DISPLAY

Warning codes

WARNING CODE: 411
On-screen: CASSETTE EJECT FAILURE

Symptom: Cassette carriage does not lift.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: 561 — 567
On-screen: TAPE DEFECTIVE

Symptom: Tape is broken.
Operation: The cassette is ejected.
Solution: If there is nothing wrong with the cassette, insert it again. Otherwise, insert another cassette.

WARNING CODE: 571 — 572
On-screen: END LEADER DETECTION

Symptom: Tape-end sensor works abnormally.
Operation: 1. Rewind mode is engaged.
2. If the leader tape is detected within 3 seconds, the cassette is ejected.
Solution: Insert the cassette again.

WARNING CODE: 581 — 582
On-screen: BEGIN LEADER DETECTION

Symptom: Tape-beginning sensor works abnormally.
Operation: 1. FF mode is engaged.
2. If the leader tape is detected within 3 seconds, the cassette is ejected.
Solution: Insert the cassette again.

WARNING CODE: 701
On-screen: DRUM MOTOR FAILURE

Symptom: Abnormal drum servo.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: 711
On-screen: CAPSTAN MOTOR FAILURE

Symptom: Abnormal capstan servo
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: 721 — 726
On-screen: SUP REEL MOTOR FAILURE

Symptom: Supply reel rotates abnormally.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

WARNING CODE: 731 — 735
On-screen: TU REEL MOTOR FAILURE

Symptom: Take-up reel rotates abnormally.
Operation: The VCR stops and all controls become inoperative.
Solution: Turn the power off and then turn on again.

When Menu switch No.343 "SUB WARNING INHIBIT" is set to "ON", the following warning codes are not available for display.
Warning code 321 "FAILURE IN LOADING"
Warning code 561 – 567 "TAPE DEFECTIVE"
Warning code 571 – 572 "END LEADER DETECTION"
Warning code 581 – 582 "BEGIN LEADER DETECTION"

10-2 TROUBLESHOOTING OTHER PROBLEMS

VIDEO PROBLEMS

Symptom: Playback picture is unstable.
Cause: Reference sync signal is set to VIDEO and the input video signal is unstable or noisy.
Solution: Take either of the following measures.
1. Set Menu switch No.003 "SYNC SELECT" to "INTERNAL". (☞p.28)
2. Set Menu switch No.003 "SYNC SELECT" to "EXTERNAL" and input an external sync signal. (☞p.28)
3. Disconnect the input video signal.

Symptom: Playback picture is blurred or interrupted.
Cause: Tracking is not adjusted correctly.
Solution: Adjust the tracking.

Cause: Video heads may be dirty.
Solution: Head cleaning is necessary. Consult your local JVC dealer.

Symptom: Picture is distorted at the switching point of recording.
Cause: Random-interlaced video signal or low S/N video signal (after repeated dubbing) has been recorded.
Solution: Set Menu switch No.000 "FRAME SERVO" to "OFF". (☞p.28)

Cause: Auto H-Phase is set to OFF.
Solution: Set Menu switch No.004 "AUTO H. PHASE" to "ON" (☞p.30)

Symptom: On-screen display is not available.
Cause: Monitor is not connected to the VIDEO OUT MONITOR connector.
Solution: Connect to VIDEO OUT MONITOR.

Cause: Menu switch No.500 "ON SCREEN DISPLAY" is set to "OFF".
Solution: Set it to "ON". (☞p.29)

Symptom: S-VHS recording is not possible.
Casue: A VHS tape is being used.
Solution: Use an S-VHS tape.

Cause: Menu switch No.100 "S-VHS SELECT" is set to "VHS".
Solution: Set it to "AUTO". (☞p.28)

AUDIO PROBLEMS

Symptom: No audio is output during playback.
Cause: Soundtrack selection is not correct.
Solution: Set the AUDIO MONITOR switch to check on which track the audio signal is recorded. (☞p.11)

Cause: Menu switch No.206 "AUD-2/LTC" is set to "LTC", and normal audio is not output from the AUD-2 track.
Solution: Set the switch to "AUD-2".

Symptom: Breaks in HI-FI audio during playback.
Cause: Tracking is not adjusted correctly.
Solution: Adjust the tracking. (☞p.35)

Symptom: HI-FI audio is not output during playback.
Cause: Menu switch No.203 "AUDIO OUT SELECT" is set to "NORM".
Solution: Set it to "SEP". (☞p.30)

Symptom: HI-FI audio is not output during search.
Cause: This is normal, not a malfunction.
Solution: To output normal audio from AUDIO OUT HI-FI during search, set Menu switch No.204 "HI-FI OUT AT SEARCH" to "NORM". (☞p.30)

Symptom: Normal audio is not output during search.
Cause: Menu switch No.337 "SLOW MODE" is set to "STEP".
Solution: Set it to "LINEAR". (☞p.32)

RECORDING PROBLEMS

Symptom: Recording is not possible.
Cause: Cassette's safety tab has been removed.
Solution: Reseal the slot with adhesive tape. (☞p.5)

Cause: Menu switch No.304 "RECORDING INHIBIT" is set to "ON".
Solution: Set it to "OFF". (☞p.31)

Reference pages
Menu switch setting p.25

10-2 TROUBLESHOOTING OTHER PROBLEMS

OPERATION PROBLEMS

Symptom: Control buttons are inoperative.
Cause: The REMOTE switch is set to REMOTE.
Solution: Set it to LOCAL. (☞p.12)

Cause: Menu switch No.002 "OPERATION LOCK" is set to "ON".
Solution: Set it to "OFF". (☞p.28)

COUNTER DISPLAY PROBLEMS

Symptom: Time counter does not run.
Cause: Time counting is based on the recorded CTL signals. The counter does not function with non-recorded segments.

Cause: The Menu switch setting mode is engaged.
Action: Press the MENU button to engage the time counter mode. (☞p.9)

Cause: The time counter of an optional remote control connected via 45-pin remote will not run at search speeds higher than X17
Action: Set Menu switches No.319 "TAPE MAX SPEED" and No.340 "SEARCH SPEED" to "X17". (☞p.32)

REPEAT PLAYBACK PROBLEMS

Symptom: Repeat start and end point cannot be set.
Cause: A different counter mode has been used to set the start and end points.
Action: Use the same counter mode (CTL or TC) for both points. (☞p.37)

Symptom: Repeat playback is not possible.
Cause: A different counter mode has been used for start/end point entry than that used for playback.
Action: Use the same counter mode for both. (☞p.37)

EDIT TIMING PROBLEMS

Symptom: There is a discrepancy between the recorder's edit point and the edit controller's.
Cause: Recorder/edit controller edit timing has not been correctly adjusted.
Solution: Refer to p.21 and set the edit timing correctly.

Reference pages
Menu switch setting.....p.25

11 OPTIONAL ACCESSORIES

Rack mount adapter SA-K65U

Required when installing the BR-S800E/BR-S500E in a 19" EIA-standard rack.

Rails and brackets
For rack installation, slide rails and brackets are required in addition to the SA-K65U. We recommend the following parts.
Accuride C-305-20 (Slide rail)
BK5355 (Bracket)

Installation
1 Attach the SA-K65U rack mount adapter to the VCR with six M4 screws.

2 Attach the inner members of the slide rails to the VCR with the six M4 screws.

3 Attach the outer members of the slide rails to the rack with the front and rear brackets.

4 Pull out the outer members of the slide rails until they stop.

5 Fix the inner members of the slide rails attached to the VCR into the rails of outer members, and insert the VCR into the rack. Insertion may be obstructed where the springs are located. Press both sides' springs and insert the VCR fully to the end.

ATTENTION:
- Do not use screws more than 6 mm long, otherwise you may damage the VCR's internal circuitry.
- The rack mount adapter handle is only for sliding the unit. Do not carry the unit by the handle.
- Special instructions for installation of slide rails may be necessary depending the rack used. For details, consult authorized personnel at the shop where you purchased the equipment.

45-pin interface board SA-K28EA

This interface board permits control of this unit via 45-pin remote.
With this board installed in the rear panel expansion slot, the following remote controls can be used.
RM-86U
RM-G810U
RM-G860E
RM-G80U

When using RM-86U:
Set Menu switches No.330 "VIDEO EDIT DELAY" and No.331 "AUDIO EDIT DELAY" to "4 FRAMES". (☞p.32)
Set Menu switches No.319 "TAPE MAX SPEED" and No.340 "SEARCH SPEED" to "X17". (☞p.31 and p.32)

NOTES:
- SA-K28E cannot be used. Use SA-K28EA.
- When editing with a 45-pin remote via this board, be sure that the settings for Menu switch No. 337 "SLOW MODE" are the same for both the player and recorder.

RS-232C interface board SA-K27EA

This interface board permits control of the unit via RS-232C remote.
An RS-232C cable is also necessary. The SA-K27EA's RS-232C connector type is D-sub 9-pin. Use "reverse-type (cross-type)" RS-232C cable.

NOTE:
SA-K27E cannot be used. Use SA-K27EA.

Digital noise reduction board SA-N50E

This board minimizes the video signal noise generated by repeated dubbing. In addition, it stabilizes video signal time base errors (jitters).

Time code generator/reader board SA-R50E

EBU-standard time code (LTC, VITC, user bits) recording and playback are possible with this board installed.
To install the SA-R50E, an adapter board SA-K50U is necessary.
To install the SA-R50E on the SA-K26E RS-422 board, no adapter board is necessary.

RS-422 interface board SA-K26E

This interface board permits control of the unit via RS-422 remote.
With the SA-R50E installed in this board, LTC/VITC editing is possible via RS-422 9-pin remote.

Wired remote control RM-G30U

Controls all basic VCR operations. Cable length is 2 m.

Y/C cables

A variety of Y/C cables are available.

Model	Connected units' connector type Output	Input	Length
VC-G30U	4-pin	4-pin	3 m
VC-G50U	4-pin	4-pin	5 m
VC-G3030U	4-pin	7-pin	3 m
VC-G2030U	7-pin	4-pin	3 m
VC-G2050U	7-pin	4-pin	5 m

Extension remote cable VC-G8030U

Extension cable for RM-G800U. Cable length is 3 m.

For details regarding installation or removal of optional boards, consult your local JVC dealer.

12 APPENDIX

12-1 GLOSSARY

Advanced sync
Advanced sync is a sync signal supplied by the TBC which compensates for the playback signal's time lag against the reference sync signal. A signal is advanced to the reference sync signal level and then input to the TBC. By locking the playback signal to this advanced sync signal, a stable video signal synchronized with the reference sync signal can be output.

Assemble editing
The most basic editing technique, assemble editing replaces the CTL signal, video signal, and audio signal simultaneously. If material is already recorded on the tape, it is erased using the full-erase heads and there may be some picture distortion for several seconds after the last edit-out point.

Audio limiter
A circuit (or a device) which automatically regulates audio signal intensity to maintain a certain level. This can prevent sound distortion due to over-level recording but is not effective with extremely high level signals where distortion may be caused at the amplifier stage.

Auto H-Phase
This circuit minimizes phase differences in the video signal which may occur at edit transitions by matching the horizontal phase of the reference sync signal (external or input video) with that of the playback video signal.

Colour Frame Servo
The Colour Frame Servo is a circuit specifically designed to prevent colour flashing during editing with PAL-system video editing recorders and players. Since the phase of the colour subcarrier wave of PAL-system colour difference signals is reversed with each scanning line, colour flashing may occur at edit points if the continuity of this phase change is not maintained. To prevent this, the colour frame servo synchronizes the colour framing of the input video signal with that of the reproduced video signal.

CTL
This is an abbreviation for the "control" signal recorded on the tape to control the video signal and track tape running time. In the VHS format, one control pulse is recorded per frame on the provided control track during recording.

CTL time code
CTL time code is a kind of time code signal based on the control signal. "0" and "1" data is generated by *modulating the pulse width of the CTL signal.* About 50 of these binary pulses are required to denote absolute position or user bits on the tape.

Dolby NR
This stands for "Dolby Noise Reduction". This is a noise reduction circuit for audio signals manufactured under license from Dolby Laboratories Licensing Corporation. Optimum noise reduction effect can be obtained when a tape recorded with Dolby NR is played back with Dolby NR.

Frame servo
In the PAL system, video images are produced at the rate of 25 frames per second with each frame consisting of 2 fields (odd and even). The frame servo is a mechanism which automatically synchronizes the odd and even fields on the recording tape with those on the source tape. This is necessary in editing to ensure that there is no instability at edit-in and -out points.

Insert editing
The most commonly used professional editing technique, insert editing replaces the pre-recorded video signal, audio signal, or both, with new material. Insert editing is based on existing CTL signals.

LTC
Acronym for "longitudinal time code". This is a time code recorded on the tape in the longitudinal direction. Normally, with professional VCRs, the normal audio-2 track is used for LTC signal recording.

TBC
Acronym for "time base corrector". Used to correct time base errors in the playback picture.

Time code
This is a signal which denotes the absolute position on the tape synchronized with the video frame. SMPTE/EBU time code is the standard time code in the video/audio industry.

User bits
This is a portion of the time code signal allocated to the user. In SMPTE time code, an 8-digit hexadecimal number, each digit of which can have values from "0" to "F" is available for user bits while 4-digit is available in CTL time code.

VITC
Acronym for "vertical interval time code". This is a time code which is inserted in the vertical blanking interval.

12-2 INDEX

A

A. DUB ENABLE AT LTC 32
AC IN socket 15
Advanced sync 56
Assemble editing 56
AUD DUB button 7
AUD DUB SELECT 29
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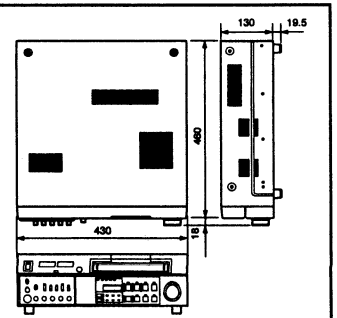
13 SPECIFICATIONS

●GENERAL	BR-S800E	BR-S500E
Format	VHS/S-VHS standard	←
Signal system	PAL-type colour signal/PAL-type Y/C signal	←
Recording & Playback mode	Recording:SP, Playback: SP	Playback: SP
Tape speed	23.39 mm/s	←
Recording & Playback time	Recording: 180 min. /Playback: 180 min.	Playback: 180 min.
Fast forward/Rewind time	Less than 2.5 min. for 180 min. tape	←
Power requirement	220 – 240 V AC, 50/60 Hz	←
Power consumption	49 W (59 W when using RM-G800U)	44 W (54 W When using RM-G800U)
Dimensions	430 (W) X 149.5 (H) X460 (D) mm	←
Weight	Approx. 11.5 kg	←
Operating temperature	5°C to 40°C	←
Storage temperature	–20°C to 60°C	←
Humidity	30 % to 80 %	←
●VIDEO		
Composite IN	0.5 to 2.0 Vp-p, 75 ohms, unbalanced	(Not provided)
Y/C IN	Y:1.0 Vp-p, 75 ohms, unbalanced	(Not provided)
	C:0.3 Vp-p, 75 ohms, unbalanced (Burst)	
Composite OUT	1.0 Vp-p, 75 ohms, unbalanced	←
Y/C OUT	Y:1.0 Vp-p, 75 ohms, unbalanced	←
	C:0.3 Vp-p, 75 ohms, unbalanced (Burst)	←
External Ref	0.5 to 2.0 Vp-p, 75 ohms, unbalanced	←
Horizontal resolution	More than 400 lines (S-VHS)/240 lines (VHS)	←
Signal-to-noise ratio	More than 45 dB (S-VHS) / 45 dB (VHS)	←
●AUDIO		
Number of tracks	4 (Hi-Fi X 2, Normal X 2)	←
Line IN	–6 dBs, 10 k-ohms, unbalanced	(Not provided)
Mic IN	–67 dBs, 3 k-ohms, unbalanced	(Not provided)
Line OUT	–6 dBs, 1 k-ohm, unbalanced	←
Phones OUT	– ∞to –20 dBs, 8 ohms, unbalanced, stereo	←
Hi-Fi audio		
Frequency response	20 to 20,000 Hz	←
Dynamic range	More than 85 dB	←
Wow & flutter	Less than 0.006% WRMS	←
Normal audio		
Frequency response	50 to 10,000 Hz	←
Signal-to-noise ratio	More than 40 dB (NR-off, at 3 % distortion)	←
Wow & flutter	Less than 0.25% RMS (Normal)	←
●ACCESSORY	Power Cord	←

DIMENSIONS
Unit: mm



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